

6. Literatur

Aardal S, Flaatten H (1996)

Nitrogen oxide (nitrogen monoxide) administered via respirator. A new therapeutic alternative in acute respiratory failure and shock lung.

Tidsskr Nor Laegeforen 116: 1210-1213.

Abraham RZ, Kobzik L, Moody MR, Reid MB, Stamler JS (1998)

Cyclic GMP is a second messenger by which nitric oxide inhibits diaphragm contraction.

Comp Biochem Physiol A Mol Integr Physiol 119: 177-183.

Agarwal A, Nick HS (2000)

Renal response to tissue injury: lessons from heme oxygenase-1 GeneAblation and expression.

J Am Soc Nephrol 11: 965-973.

Aghdasi B, Reid MB, Hamilton SL (1997)

Nitric oxide protects the skeletal muscle Ca²⁺ release channel from oxidation induced activation.

J Biol Chem 272: 25462-25467.

Alderton WK, Cooper CE, Knowles RG (2001)

Nitric oxide synthases: structure, function and inhibition.

Biochem J 357: 593-615.

Andreeva SG, Dikkes P, Epstein PM, Rosenberg PA (2001)

Expression of cGMP-specific phosphodiesterase 9A mRNA in the rat brain.

J Neurosci 21: 9068-9076.

Arnold WP, Aldred R, Murad F (1977)

Cigarette smoke activates guanylate cyclase and increases guanosine 3',5'-monophosphate in tissues.

Science 198: 934-936.

Barouch LA, Harrison RW, Skaf MW, Rosas GO, Cappola TP, Kobeissi ZA, Hobai IA, Lemmon CA, Burnett AL, O'Rourke B, Rodriguez ER, Huang PL, Lima JA, Berkowitz DE, Hare JM (2002)

Nitric oxide regulates the heart by spatial confinement of nitric oxide synthase isoforms.
Nature 416: 337-339.

Baum O, Feussner M, Richter H, Gossrau R (2000)

Heme oxygenase-2 is present in the sarcolemma region of skeletal muscle fibers and is non-continuously co-localized with nitric oxide synthase-1.
Acta Histochem 102: 281-298.

Baylis C, Qiu C (1996)

Importance of nitric oxide in the control of renal hemodynamics.
Kidney Int 49: 1727-1731.

Behrends S, Harteneck C, Schultz G, Koesling D (1995)

A variant of the alpha 2 subunit of soluble guanylyl cyclase contains an insert homologous to a region within adenylyl cyclases and functions as a dominant negative protein.
J Biol Chem 270: 21109-21113.

Behrends S, Vehse K, Scholz H, Bullerdiek J, Kazmierczak B (2000)

Assignment of GUCY1A3, a candidate gene for hypertension, to human chromosome bands 4q31.1-->q31.2 by in situ hybridization.
Cytogenet Cell Genet 88: 204-205.

Bredt DS, Glatt CE, Hwang PM, Fotuhi M, Dawson TM, Snyder SH (1991b)

Nitric oxide synthase protein and mRNA are discretely localized in neuronal populations of the mammalian CNS together with NADPH.
Neuron 7: 615-624.

Bredt DS, Hwang PM, Glatt CE, Lowenstein C, Reed RR, Snyder SH (1991a)

Cloned and expressed nitric oxide synthase structurally resembles cytochrome P-450 reductase.

Nature 351: 714-718.

Bredt DS, Snyder SH (1990)

Isolation of nitric oxide synthetase, a calmodulin-requiring enzyme.

Proc Natl Acad Sci USA 87: 682-685.

Bredt DS, Snyder SH (1994)

Transient nitric oxide synthase neurons in embryonic cerebral cortical plate, sensory ganglia, and olfactory epithelium.

Neuron 13: 301-313.

Brenman JE, Xia H, Chao DS, Black SM, Bredt DS (1997)

Regulation of neuronal nitric oxide synthase through alternative transcripts.

Dev Neurosci 19: 224-231.

Brune B, Ullrich V (1987)

Inhibition of platelet aggregation by carbon monoxide is mediated by activation of guanylate cyclase.

Mol Pharmacol 32: 497-504.

Budworth J, Meillerais S, Charles I, Powell K (1999)

Tissue distribution of the human soluble guanylate cyclases.

Biochem Biophys Res Commun 263: 696-701.

Buechler WA, Nakane M, Murad F (1991)

Expression of soluble guanylate cyclase activity requires both enzyme subunits.

Biochem Biophys Res Commun 174: 351-357.

Bult H, Boeckxstaens GE, Pelckmans PA, Jordaens FH, Van Maercke YM, Herman AG (1990)

Nitric oxide as an inhibitory non-adrenergic non-cholinergic neurotransmitter.

Nature 345: 346-347.

Burstyn JN, Yu AE, Dierks EA, Hawkins BK, Dawson JH (1995)

Studies of the heme coordination and ligand binding properties of soluble guanylyl cyclase (sGC): characterization of Fe(II)sGC and Fe(II)sGC(CO) by electronic absorption and magnetic circular dichroism spectroscopies and failure of CO to activate the enzyme.

Biochemistry 34: 5896-5903

Busconi L, Michel T (1993)

Endothelial nitric oxide synthase. N-terminal myristoylation determines subcellular localization.

J Biol Chem 268: 8410-8413.

Cordelier P, Esteve JP, Rivard N, Marletta M, Vaysse N, Susini C, Buscail L (1999)

The activation of neuronal NO synthase is mediated by G-protein betagamma subunit and the tyrosine phosphatase SHP-2.

Faseb J 13: 2037-2050.

Currie MG, Fok KF, Kato J, Moore nRJ, Hamra FK, Duffin KL, Smith CE (1992)

Guanylin: an endogenous activator of guanylate cyclase.

Proc Natl acad Sci USA 89(3):947-951

Daff S, Noble MA, Craig DH, Rivers SL, Chapman SK, Munro AW, Fujiwara S, Rozhkova E, Sagami I, Shimizu T (2001)

Control of electron transfer in neuronal NO synthase.

Biochem Soc Trans 29: 147-152.

Darley-USmar V, Wiseman H, Halliwell B (1995)

Nitric oxide and oxygen radicals: a question of balance.

FEBS Lett 369: 131-135.

de Vente J, Bol JG, Steinbusch HW (1989)

Localization of cGMP in the cerebellum of the adult rat: an immunohistochemical study.

Brain Res 504: 332-337.

Durante W, Schafer AI (1998)

Carbon monoxide and vascular cell function (Review).

Int J Mol Med 2: 255-262.

Esteban FJ, Pedrosa JA, Jimenez A, Fernandez AP, Bentura ML, Martinez-Murillo R, Rodrigo J, Peinado MA (1997)

Distribution of neuronal nitric oxide synthase in the rat liver.

Neurosci Lett 226: 99-102.

Etgen GJ, Jr., Fryburg DA, Gibbs EM (1997)

Nitric oxide stimulates skeletal muscle glucose transport through a calcium/contraction- and phosphatidylinositol-3-kinase-independent pathway.

Diabetes 46: 1915-1919.

Everett AD, Le Cras TD, Xue C, Johns RA (1998)

eNOS expression is not altered in pulmonary vascular remodeling due to increased pulmonary blood flow.

Am J Physiol 274: L1058-1065.

Feussner M, Richter H, Baum O, Gossrau R (2001)

Association of soluble guanylate cyclase with the sarcolemma of mammalian skeletal muscle fibers.

Acta Histochem 103: 265-277.

Förstermann U, Gath I, Schwarz P, Closs EI, Kleinert H (1995a)

Isoforms of nitric oxide synthase. Properties, cellular distribution and expressional control.

Biochem Pharmacol 50: 1321-1332.

Förstermann U, Kleinert H (1995b)

Nitric oxide synthase: expression and expressional control of the three isoforms.

Naunyn Schmiedebergs Arch Pharmacol 352: 351-364.

Friebe A, Schultz G, Koesling D (1996)

Sensitizing soluble guanylyl cyclase to become a highly CO-sensitive enzyme.

Embo J 15: 6863-6868.

Fujisawa H, Ogura T, Kurashima Y, Yokoyama T, Yamashita J, Esumi H (1994)

Expression of two types of nitric oxide synthase mRNA in human neuroblastoma cell lines.

J Neurochem 63: 140-145.

Furchgott RF, Zawadzki JV (1980)

The obligatory role of endothelial cells in the relaxation of arterial smooth muscle by acetylcholine.

Nature 288: 373-376.

Garthwaite J, Charles SL, Chess-Williams R (1988)

Endothelium-derived relaxing factor release on activation of NMDA receptors suggests role as intercellular messenger in the brain.

Nature 336: 385-388.

Garthwaite J, Garthwaite G, Palmer RM, Moncada S (1989)

NMDA receptor activation induces nitric oxide synthesis from arginine in rat brain slices.

Eur J Pharmacol 172: 413-416.

Garthwaite J, Southam E, Anderton M (1989a)

A kainate receptor linked to nitric oxide synthesis from arginine.

J Neurochem 53: 1952-1954.

Gerzer R, Hofmann F, Schultz G (1981)

Purification of a soluble, sodium-nitroprusside-stimulated guanylate cyclase from bovine lung.

Eur J Biochem 116: 479-486.

Giuli G, Roechel N, Scholl U, Mattei MG, Guellaen G (1993)

Colocalization of the genes coding for the alpha 3 and beta 3 subunits of soluble guanylyl cyclase to human chromosome 4 at q31.3-q33.

Hum Genet 91: 257-260.

Giuli G, Scholl U, Bulle F, Guellaen G (1992)

Molecular cloning of the cDNAs coding for the two subunits of soluble guanylyl cyclase from human brain.

FEBS Lett 304: 83-88.

Goldberg ND, O'Dea RF, Haddock MK (1973)

Cyclic GMP.

Adv Cyclic Nucleotide Res 3: 155-223.

Grozdanovic Z, Gossrau R (1996)

Expression of heme oxygenase-2 (HO-2)-like immunoreactivity in rat tissues.

Acta Histochem 98: 203-214.

Grozdanovic Z, Nakos G, Dahrmann G, Mayer B, Gossrau R (1995)

Species-independent expression of nitric oxide synthase in the sarcolemma region of visceral and somatic striated muscle fibers.

Cell Tissue Res 281: 493-499.

Guembe L, Villaro AC (1999)

Histochemical demonstration of neuronal nitric oxide synthase during development of mouse respiratory tract.

Am J Respir Cell Mol Biol 20: 342-351.

Haab P (1990)

The effect of carbon monoxide on respiration.

Experientia 46: 1202-1206.

Hardman JG, Sutherland EW (1969)

Guanylyl cyclase, an enzyme catalyzing the formation of guanosine 3',5'-monophosphate from guanosine triphosphate.

J Biol Chem 244: 6363-6370

Harteneck C, Koesling D, Soling A, Schultz G, Böhme E (1990)

Expression of soluble guanylyl cyclase. Catalytic activity requires two enzyme subunits.
FEBS Lett 272: 221-223.

Harteneck C, Wedel B, Koesling D, Malkewitz J, Böhme E, Schultz G (1991)

Molecular cloning and expression of a new alpha-subunit of soluble guanylyl cyclase. Interchangeability of the alpha-subunits of the enzyme.
FEBS Lett 292: 217-222.

Hayashi Y, Nishio M, Naito Y, Yokokura H, Nimura Y, Hidaka H, Watanabe Y (1999)

Regulation of neuronal nitric-oxide synthase by calmodulin kinases.
J Biol Chem 274: 20597-20602.

Haynes L, Yau KW (1985)

Cyclic GMP-sensitive conductance in outer segment membrane of catfish cones.
Nature 317: 61-64.

Hecker M, Mulsch A, Bassenge E, Förstermann U, Busse R (1994)

Subcellular localization and characterization of nitric oxide synthase(s) in endothelial cells: physiological implications.
Biochem J 299: 247-252.

Hobbs AJ (1997)

Soluble guanylate cyclase: the forgotten sibling.
Trends Pharmacol Sci 18: 484-491.

Huang PL (1999)

Neuronal and endothelial nitric oxide synthase gene knockout mice.
Braz J Med Biol Res 32: 1353-1359.

Huang PL, Dawson TM, Bredt DS, Snyder SH, Fishman MC (1993)

Targeted disruption of the neuronal nitric oxide synthase gene.

Cell 75: 1273-1286.

Humbert P, Niroomand F, Fischer G, Mayer B, Koesling D, Hinsch KD, Gausepohl H, Frank R, Schultz G, Böhme E (1990)

Purification of soluble guanylyl cyclase from bovine lung by a new immunoaffinity chromatographic method.

Eur J Biochem 190: 273-278.

Ignarro LJ, Ballot B, Wood KS (1984)

Regulation of soluble guanylate cyclase activity by porphyrins and metalloporphyrins.

J Biol Chem 259: 6201-6207.

Ingi T, Cheng J, Ronnett GV (1996)

Carbon monoxide: an endogenous modulator of the nitric oxide-cyclic GMP signaling system.

Neuron 16: 835-842.

Jadeski LC, Hum KO, Chakraborty C, Lala PK (2000)

Nitric oxide promotes murine mammary tumour growth and metastasis by stimulating tumour cell migration, invasiveness and angiogenesis.

Int J Cancer 86: 30-39.

Josic D, Schuett W, Neumeier R, Reutter W (1985)

Purification of liver and hepatoma membrane proteins by high-performance liquid chromatography.

FEBS Lett 185: 182-186.

Kanter MM, Nolte LA, Holloszy JO (1993)

Effects of an antioxidant vitamin mixture on lipid peroxidation at rest and postexercise.

J Appl Physiol 74: 965-969.

Kapur S, Bedard S, Marcotte B, Cote CH, Marette A (1997)

Expression of nitric oxide synthase in skeletal muscle: a novel role for nitric oxide as a modulator of insulin action.

Diabetes 46: 1691-1700.

Keyse SM, Tyrrell RM (1989)

Heme oxygenase is the major 32-kDa stress protein induced in human skin fibroblasts by UVA radiation, hydrogen peroxide, and sodium arsenite.

Proc Natl Acad Sci USA 86: 99-103.

Kharitonov VG, Sharma VS, Pilz RB, Magde D, Koesling D (1995)

Basis of guanylate cyclase activation by carbon monoxide.

Proc Natl Acad Sci USA 92: 2568-2571.

Kimura H, Murad F (1974)

Evidence for two different forms of guanylate cyclase in rat heart.

J Biol Chem 249: 6910-6916.

Kobzik L, Reid MB, Bredt DS, Stamler JS (1994)

Nitric oxide in skeletal muscle.

Nature 372: 546-548.

Kobzik L, Stringer B, Balligand JL, Reid MB, Stamler JS (1995)

Endothelial type nitric oxide synthase in skeletal muscle fibers: mitochondrial relationships.

Biochem Biophys Res Commun 211: 375-381.

Koesling D (1999)

Studying the structure and regulation of soluble guanylyl cyclase.

Methods 19: 485-493.

Koesling D, Friebe A (1999)

Soluble guanylyl cyclase: structure and regulation.

Rev Physiol Biochem Pharmacol 135: 41-65.

Koglin M, Vehse K, Budaeus L, Scholz H, Behrends S (2001)

Nitric oxide activates the beta 2 subunit of soluble guanylyl cyclase in the absence of a

second subunit.

J Biol Chem 276: 30737-30743.

Komuro A, Tobe T, Nakano Y, Yamaguchi T, Tomita M (1996)

Cloning and characterization of the cDNA encoding human biliverdin-IX alpha reductase.

Biochim Biophys Acta 1309: 89-99.

Kondo S, Ishiguro N, Iwata H, Nakashima I, Isobe K (1993)

The effects of nitric oxide on chondrocytes and lymphocytes.

Biochem Biophys Res Commun 197: 1431-1437.

Krenacs T, Molnar E, Dobo E, Dux L (1989)

Fibre typing using sarcoplasmic reticulum Ca²⁺-ATPase and myoglobin immunohistochemistry in rat gastrocnemius muscle.

Histochem J 21: 145-155.

Kusner LL, Kim E, Kaminski HJ (1999)

Heme oxygenase-2 expression at rat neuromuscular junctions.

Neurosci Lett 273: 143-146.

Kuwano A, Ikeda H, Takeda K, Nakai H, Kondo I, Shibahara S (1994)

Mapping of the human gene for inducible heme oxygenase to chromosome 22q12.

Tohoku J Exp Med 172: 389-392.

Laemmli UK (1970)

Cleavage of structural proteins during the assembly of the head of bacteriophage T4.

Nature 227: 680-685.

Lau KS, Grange RW, Chang WJ, Kamm KE, Sarelius I, Stull JT (1998)

Skeletal muscle contractions stimulate cGMP formation and attenuate vascular smooth muscle myosin phosphorylation via nitric oxide.

FEBS Lett 431: 71-74.

Laudanski P, Anchim T, Wolczynski S (2001)

The role of nitric oxide in carcinogenesis and progression of neoplastic processes.

Ginekol Pol 72: 251-260.

Lee KH, Baek MY, Moon KY, Song WK, Chung CH, Ha DB, Kang MS (1994)

Nitric oxide as a messenger molecule for myoblast fusion.

J Biol Chem 269: 14371-14374.

Lehtimäki L, Kankaanranta H, Saarelainen S, Hahtola P, Jarvenpää R, Koivula T, Turjanmaa V, Moilanen E (2001)

Extended exhaled NO measurement differentiates between alveolar and bronchial inflammation.

Am J Respir Crit Care Med 163: 1557-1561.

Lincoln TM (1989)

Cyclic GMP and mechanisms of vasodilation.

Pharmacol Ther 41: 479-502.

Lowenstein CJ, Glatt CS, Brecht DS, Snyder SH (1992)

Cloned and expressed macrophage nitric oxide synthase contrasts with the brain enzyme.

Proc Natl Acad Sci USA 89: 6711-6715.

Maines MD (1988)

Heme oxygenase: function, multiplicity, regulatory mechanisms, and clinical applications.

Faseb J 2: 2557-2568.

Maines MD (1997)

The heme oxygenase system: a regulator of second messenger gases.

Annu Rev Pharmacol Toxicol 37: 517-554.

Maines MD (2000)

The heme oxygenase system and its functions in the brain.

Cell Mol Biol (Noisy-le-grand) 46: 573-585.

Maines MD, Plevoda BV, Huang TJ, McCoubrey WK, Jr. (1996)

Human biliverdin IX α reductase is a zinc-metalloprotein. Characterization of purified and Escherichia coli expressed enzymes.

Eur J Biochem 235: 372-381.

Maines MD, Trakshel GM, Kutty RK (1986)

Characterization of two constitutive forms of rat liver microsomal heme oxygenase. Only one molecular species of the enzyme is inducible.

J Biol Chem 261: 411-419.

Marechal G, Beckers-Bleukx G (1998)

Effect of nitric oxide on the maximal velocity of shortening of a mouse skeletal muscle.

Pflügers Arch 436: 906-913.

Marletta MA (1994)

Nitric oxide synthase: aspects concerning structure and catalysis.

Cell 78: 927-930.

Marletta MA (1998)

Synergistic activation of soluble guanylate cyclase by YC-1 and carbon monoxide: implications for the role of cleavage of the iron-histidine bond during activation by nitric oxide.

Chem Biol 5: 255-261.

Marletta MA, Yoon PS, Iyengar R, Leaf CD, Wishnok JS (1988)

Macrophage oxidation of L-arginine to nitrite and nitrate: nitric oxide is an intermediate.

Biochemistry 27: 8706-8711.

Mathie R, Griffith T (1999)

The haemodynamic effects of nitric oxide.

aus: The haemodynamic effects of nitric oxide, Imperial, College Press, 1999

Mayer B, John M, Böhme E (1990)

Purification of a Ca²⁺/calmodulin-dependent nitric oxide synthase from porcine cerebellum. Cofactor-role of tetrahydrobiopterin.

FEBS Lett 277: 215-219.

McCoubrey WK, Jr., Huang TJ, Maines MD (1997a)

Heme oxygenase-2 is a hemoprotein and binds heme through heme regulatory motifs that are not involved in heme catalysis.

J Biol Chem 272: 12568-12574.

McCoubrey WK, Jr., Huang TJ, Maines MD (1997b)

Isolation and characterization of a cDNA from the rat brain that encodes hemoprotein heme oxygenase-3.

Eur J Biochem 247: 725-732.

McCoubrey WK, Jr., Maines MD (1994)

The structure, organization and differential expression of the gene encoding rat heme oxygenase-2.

Gene 139: 155-161.

McLaughlin BE, Chretien ML, Choi C, Brien JF, Nakatsu K, Marks GS (2000)

Potential of carbon monoxide-induced relaxation of rat aorta by YC-1 [3-(5'-hydroxymethyl-2'-furyl)-1-benzylindazole].

Can J Physiol Pharmacol 78: 343-349.

McMillan K, Bredt DS, Hirsch DJ, Snyder SH, Clark JE, Masters BS (1992)

Cloned, expressed rat cerebellar nitric oxide synthase contains stoichiometric amounts of heme, which binds carbon monoxide.

Proc Natl Acad Sci USA 89: 11141-11145.

Michel JB, Michel T (1997)

The role of palmitoyl-protein thioesterase in the palmitoylation of endothelial nitric oxide synthase.

FEBS Lett 405: 356-362.

Minetti M, Mallozzi C, Di Stasi AM, Pietraforte D (1998)

Bilirubin is an effective antioxidant of peroxynitrite-mediated protein oxidation in human blood plasma.

Arch Biochem Biophys 352: 165-174.

Mitchell JA, Kohlhaas KL, Matsumoto T, Pollock JS, Förstermann U, Warner TD, Schmidt HH, Murad F (1992)

Induction of NADPH-dependent diaphorase and nitric oxide synthase activity in aortic smooth muscle and cultured macrophages..

Mol Pharmacol 41: 1163-1168.

Moncada S (1993)

Significance of endogenous nitric oxide production for the effect of nitrates and in septic shock.

Schweiz Rundsch Med Prax 82: 1154-1160.

Moncada S, Higgs EA (1995)

Molecular mechanisms and therapeutic strategies related to nitric oxide.

Faseb J 9: 1319-1330.

Moncada S, Palmer RM, Higgs EA (1989)

Biosynthesis of nitric oxide from L-arginine. A pathway for the regulation of cell function and communication.

Biochem Pharmacol 38: 1709-1715.

Mordan LJ, Burnett TS, Zhang LX, Tom J, Cooney RV (1993)

Inhibitors of endogenous nitrogen oxide formation block the promotion of neoplastic transformation in C3H 10T1/2 fibroblasts.

Carcinogenesis 14: 1555-1559.

Moreno-Lopez B, Escudero M, De Vente J, Estrada C (2001)

Morphological identification of nitric oxide sources and targets in the cat oculomotor

system.

J Comp Neurol 435: 311-324.

Mundel P, Bachmann S, Bader M, Fischer A, Kummer W, Mayer B, Kriz W (1992)

Expression of nitric oxide synthase in kidney macula densa cells.

Kidney Int 42: 1017-1019.

Murthy KS (2001)

Activation of phosphodiesterase 5 and inhibition of guanylate cyclase by cGMP-dependent protein kinase in smooth muscle.

Biochem J 360: 199-208

Nakamura T, Gold GH (1987)

A cyclic nucleotide-gated conductance in olfactory receptor cilia.

Nature 325: 442-444.

Nakane M, Schmidt HH, Pollock JS, Förstermann U, Murad F (1993)

Cloned human brain nitric oxide synthase is highly expressed in skeletal muscle.

FEBS Lett 316: 175-180.

Nathan C, Xie QW (1994a)

Regulation of biosynthesis of nitric oxide.

J Biol Chem 269: 13725-13728.

Nathan C, Xie QW (1994b)

Nitric oxide synthases: roles, tolls, and controls.

Cell 78: 915-918.

Nishida CR, Ortiz de Montellano PR (1998)

Electron transfer and catalytic activity of nitric oxide synthases. Chimeric constructs of the neuronal, inducible, and endothelial.

J Biol Chem 273: 5566-5571.

Norris KA, Schrimpf JE, Flynn JL, Morris SM, Jr. (1995)

Enhancement of macrophage microbicidal activity: supplemental arginine and citrulline augment nitric oxide production in murine peritoneal macrophages and promote intracellular killing of *Trypanosoma cruzi*.

Infect Immun 63: 2793-2796.

Ny L, Alm P, Ekstrom P, Larsson B, Grundemar L, Andersson KE (1996)

Localization and activity of haem oxygenase and functional effects of carbon monoxide in the feline lower oesophageal sphincter.

Br J Pharmacol 118: 392-399.

O'Dell TJ, Hawkins RD, Kandel ER, Arancio O (1991)

Tests of the roles of two diffusible substances in long-term potentiation: evidence for nitric oxide as a possible early retrograde messenger.

Proc Natl Acad Sci USA 88: 11285-11289.

Ogilvie P, Schilling K, Billingsley ML, Schmidt HH (1995)

Induction and variants of neuronal nitric oxide synthase type I during synaptogenesis.

Faseb J 9: 799-806.

Okada D (1996)

Differential effects of protein kinase C on neuronal nitric oxide synthase activity in rat cerebellar slices and in vitro.

J Chem Neuroanat 10: 213-220.

Padma-Nathan H, Giuliano F (2001)

Oral drug therapy for erectile dysfunction.

Urol Clin North Am 28: 321-334.

Palmer RM, Ferrige AG, Moncada S (1987)

Nitric oxide release accounts for the biological activity of endothelium-derived relaxing factor.

Nature 327: 524-526.

Panahian N, Huang T, Maines MD (1999)

Enhanced neuronal expression of the oxidoreductase--biliverdin reductase--after permanent focal cerebral ischemia.

Brain Res 850: 1-13.

Park CS, Krishna G, Ahn MS, Kang JH, Chung WG, Kim DJ, Hwang HK, Lee JN, Paik SG, Cha YN (2000)

Differential and constitutive expression of neuronal, inducible, and endothelial nitric oxide synthase mRNAs and proteins in pathologically normal human tissues.

Nitric Oxide 4: 459-471.

Parkar M, Jeremiah SJ, Povey S, Lee AF, Finlay FO, Goodfellow PN, Solomon E (1984)

Confirmation of the assignment of human biliverdin reductase to chromosome 7.

Ann Hum Genet 48: 57-60.

Planitzer G, Miethke A, Baum O (2001)

Nitric oxide synthase-1 is enriched in fast-twitch oxidative myofibers.

Cell Tissue Res 306: 325-333.

Prabhakar NR, Dinerman JL, Agani FH, Snyder SH (1995)

Carbon monoxide: a role in carotid body chemoreception.

Proc Natl Acad Sci USA 92: 1994-1997.

Price TD, Ashman DF, Melicow MM (1967)

Organophosphates of urine, including adenosine 3',5'-monophosphate and guanosine 3',5'-monophosphate.

Biochim Biophys Acta 138: 452-465

Raju VS, McCoubrey WK, Jr., Maines MD (1997)

Regulation of heme oxygenase-2 by glucocorticoids in neonatal rat brain: characterization of a functional glucocorticoid response element.

Biochim Biophys Acta 1351: 89-104.

Ramos KS, Lin H, McGrath JJ (1989)

Modulation of cyclic guanosine monophosphate levels in cultured aortic smooth muscle

cells by carbon monoxide.

Biochem Pharmacol 38: 1368-1370.

Reid MB (1998)

Role of nitric oxide in skeletal muscle: synthesis, distribution and functional importance.

Acta Physiol Scand 162: 401-409.

Reid MB, Khawli FA, Moody MR (1993)

Reactive oxygen in skeletal muscle. III. Contractility of unfatigued muscle.

J Appl Physiol 75: 1081-1087.

Romeis B (1968)

Mikroskopische Technik.

in: Romeis, B: Mikroskopische Technik, Münschen, Wien, 1744, 259, 368 (1968)

Rotenberg MO, Maines MD (1991)

Characterization of a cDNA-encoding rabbit brain heme oxygenase-2 and identification of a conserved domain among mammalian heme oxygenase isozymes: possible heme-binding site?

Arch Biochem Biophys 290: 336-344.

Russwurm M, Behrends S, Harteneck C, Koesling D (1998)

Functional properties of a naturally occurring isoform of soluble guanylyl cyclase.

Biochem J 335: 125-130.

Russwurm M, Wittau N, Koesling D (2001)

Guanylyl cyclase/PSD-95 interaction: targeting of the nitric oxide-sensitive alpha2beta1 guanylyl cyclase to synaptic membranes.

J Biol Chem 276: 44647-44652.

Saito F, Yamaguchi T, Komuro A, Tobe T, Ikeuchi T, Tomita M, Nakajima H (1995)

Mapping of the newly identified biliverdin-IX beta reductase gene (BLVRB) to human chromosome 19q13.13-->q13.2 by fluorescence in situ hybridization.

Cytogenet Cell Genet 71: 179-181.

Samdani AF, Dawson TM, Dawson VL (1997)

Nitric oxide synthase in models of focal ischemia.

Stroke 28: 1283-1288.

Scherer-Singler U, Vincent SR, Kimura H, McGeer EG (1983)

Demonstration of a unique population of neurons with NADPH-diaphorase histochemistry.

J Neurosci Methods 9: 229-234.

Schmidt HH, Murad F (1991)

Purification and characterization of a human NO synthase.

Biochem Biophys Res Commun 181: 1372-1377.

Schmidt HH, Pollock JS, Nakane M, Förstermann U, Murad F (1992)

Ca²⁺/calmodulin-regulated nitric oxide synthases.

Cell Calcium 13: 427-434.

Schmidt HH, Walter U (1994)

NO at work.

Cell 78: 919-925.

Schoser BG, Behrends S (2001)

Soluble guanylyl cyclase is localized at the neuromuscular junction in human skeletal muscle.

Neuroreport 12: 979-981.

Schultz G, Böhme E, Munske K (1969)

Guanyl cyclase. Determination of enzyme activity.

Life Sci 8: 1323-1332

Schulz S, Singh S, Bellet RA, Singh G, Tubb DJ, Chin H, Garbers DL (1989)

The primary structure of a plasma membrane guanylate cyclase demonstrates diversity within this new receptor family.

Cell 58(6): 1155-1162

Schulz S, Wedel BJ, Matthews A, Garbers DL. (1998)

The Cloning and Expression of a NEW Guanylyl Cyclase Orphan Receptor.

J Biol Chem 273(2): 1032-1037

Seki T, Naruse M, Naruse K, Yoshimoto T, Tanabe A, Tsuchiya K, Hirose S, Imaki T, Nihei H, Demura H (1997)

Roles of heme oxygenase/carbon monoxide system in genetically hypertensive rats.

Biochem Biophys Res Commun 241: 574-578.

Shah V, Haddad FG, Garcia-Cardena G, Frangos JA, Mennone A, Groszmann RJ, Sessa WC (1997)

Liver sinusoidal endothelial cells are responsible for nitric oxide modulation of resistance in the hepatic sinusoids.

J Clin Invest 100: 2923-2930.

Shah V, Toruner M, Haddad F, Cadelina G, Papapetropoulos A, Choo K, Sessa WC, Groszmann RJ (1999)

Impaired endothelial nitric oxide synthase activity associated with enhanced caveolin binding in experimental cirrhosis in the rat.

Gastroenterology 117: 1222-1228.

Sherman TS, Chen Z, Yuhanna IS, Lau KS, Margraf LR, Shaul PW (1999)

Nitric oxide synthase isoform expression in the developing lung epithelium.

Am J Physiol 276: L383-390.

Shesely EG, Maeda N, Kim HS, Desai KM, Kregel JH, Laubach VE, Sherman PA, Sessa WC, Smithies O (1996)

Elevated blood pressures in mice lacking endothelial nitric oxide synthase.

Proc Natl Acad Sci USA 93: 13176-13181.

Silvagno F, Xia H, Bredt DS (1996)

Neuronal nitric-oxide synthase-mu, an alternatively spliced isoform expressed in differentiated skeletal muscle.

J Biol Chem 271: 11204-11208.

Snyder SH, Jaffrey SR, Zakhary R (1998)

Nitric oxide and carbon monoxide: parallel roles as neural messengers.

Brain Res Brain Res Rev 26: 167-175.

Stocker R, Glazer AN, Ames BN (1987)

Antioxidant activity of albumin-bound bilirubin.

Proc Natl Acad Sci USA 84: 5918-5922.

Stocker R, Peterhans E (1989)

Synergistic interaction between vitamin E and the bile pigments bilirubin and biliverdin.

Biochim Biophys Acta 1002: 238-244.

Stone JR, Marletta MA (1994)

Soluble guanylate cyclase from bovine lung: activation with nitric oxide and carbon monoxide and spectral characterization of the ferrous and ferric states.

Biochemistry 33: 5636-5640.

Stone JR, Marletta MA (1995)

The ferrous heme of soluble guanylate cyclase: formation of hexacoordinate complexes with carbon monoxide and nitrosomethane.

Biochemistry 34: 16397-16403.

Suematsu M, Ishimura Y (2000)

The heme oxygenase-carbon monoxide system: a regulator of hepatobiliary function.

Hepatology 31: 3-6.

Thomas E, Pearse, AGE (1961)

The fine localization of dehydrogenases in the nervous system.

Histochemie 2: 266-282

Thomas GD, Sander M, Lau KS, Huang PL, Stull JT, Victor RG (1998b)

Impaired metabolic modulation of alpha-adrenergic vasoconstriction in dystrophin-deficient skeletal muscle.

Proc Natl Acad Sci USA 95: 15090-15095.

Thomas GD, Victor RG (1998a)

Nitric oxide mediates contraction-induced attenuation of sympathetic vasoconstriction in rat skeletal muscle.

J Physiol 506: 817-826.

Tomita T, Tsuyama S, Imai Y, Kitagawa T (1997)

Purification of bovine soluble guanylate cyclase and ADP-ribosylation on its small subunit by bacterial toxins.

J Biochem (Tokyo) 122: 531-536.

Tremblay J, Desjardins R, Hum D, Gutkowska J, Hamet P (2002)

Biochemistry and physiology of the natriuretic peptide receptor guanylyl cyclases.

Mol Cell Biochem 230: 31-47

Utz J, Ullrich V (1991)

Carbon monoxide relaxes ileal smooth muscle through activation of guanylate cyclase.

Biochem Pharmacol 41: 1195-1201.

Venema VJ, Marrero MB, Venema RC (1996)

Bradykinin-stimulated protein tyrosine phosphorylation promotes endothelial nitric oxide synthase translocation to the cytoskeleton.

Biochem Biophys Res Commun 226: 703-710.

Verma A, Hirsch DJ, Glatt CE, Ronnett GV, Snyder SH (1993)

Carbon monoxide: a putative neural messenger.

Science 259: 381-384.

Walter U (1989)

Physiological role of cGMP and cGMP-dependent protein kinase in the cardiovascular system.

Rev Physiol Biochem Pharmacol 113: 41-88.

Wang T, Xie Z, Lu B (1995)

Nitric oxide mediates activity-dependent synaptic suppression at developing

neuromuscular synapses.

Nature 374: 262-266.

Wang ZY, Hakanson R (1995)

Role of nitric oxide (NO) in ocular inflammation.

Br J Pharmacol 116: 2447-2450.

Wedel B, Humbert P, Harteneck C, Foerster J, Malkewitz J, Böhme E, Schultz G, Koesling D
Mutation of His-105 in the β_1 subunit yields a nitric oxide-insensitive form of soluble guanylyl cyclase.

Proc Natl Acad Sci USA 91: 2592-2596

Weiner CP, Lizasoain I, Baylis SA, Knowles RG, Charles IG, Moncada S (1994)

Induction of calcium-dependent nitric oxide synthases by sex hormones.

Proc Natl Acad Sci USA 91: 5212-5216.

Weitzberg E, Lundberg JO (1998)

Nonenzymatic nitric oxide production in humans.

Nitric Oxide 2: 1-7.

Werkstrom V, Ny L, Persson K, Andersson KE (1997)

Carbon monoxide-induced relaxation and distribution of haem oxygenase isoenzymes in the pig urethra and lower oesophagogastric junction.

Br J Pharmacol 120: 312-318.

White KA, Marletta MA (1992)

Nitric oxide synthase is a cytochrome P-450 type hemoprotein.

Biochemistry 31: 6627-6631.

Xie Q, Nathan C (1994)

The high-output nitric oxide pathway: role and regulation.

J Leukoc Biol 56: 576-582.

Xu KY, Huso DL, Dawson TM, Bredt DS, Becker LC (1999)

Nitric oxide synthase in cardiac sarcoplasmic reticulum.

Proc Natl Acad Sci USA 96: 657-662.

Xu L, Tripathy A, Pasek DA, Meissner G (1998)

Potential for pharmacology of ryanodine receptor/calcium release channels.

Ann N Y Acad Sci 853: 130-148.

Xue C, Johns RA (1996)

Upregulation of nitric oxide synthase correlates temporally with onset of pulmonary vascular remodeling in the hypoxic rat.

Hypertension 28: 743-753.

Yim CY, McGregor JR, Kwon OD, Bastian NR, Rees M, Mori M, Hibbs JB, Jr., Samlowski WE (1995)

Nitric oxide synthesis contributes to IL-2-induced antitumor responses against intraperitoneal Meth A tumor.

J Immunol 155: 4382-4390.

Young ME, Leighton B (1998)

Evidence for altered sensitivity of the nitric oxide/cGMP signalling cascade in insulin-resistant skeletal muscle.

Biochem J 329: 73-79.

Yu F, Warburton D, Wellington S, Danziger RS (1996)

Assignment of GUCIA2, the gene coding for the alpha 2 subunit of soluble guanylyl cyclase, to position 11q21-q22 on human chromosome 11.

Genomics 33: 334-336.

Yuen PS, Potter LR, Garbers DL (1990)

A new form of guanylyl cyclase is preferentially expressed in rat kidney.

Biochemistry 29: 10872-10878.

Zaidi NF, Lagenaur CF, Hilker RJ, Xiong H, Abramson JJ, Salama G (1989)

Disulfide linkage of biotin identifies a 106-kDa Ca²⁺ release channel in sarcoplasmic

reticulum.

J Biol Chem 264: 21737-21747.

Zoche M, Beyermann M, Koch KW (1997)

Introduction of a phosphate at serine741 of the calmodulin-binding domain of the neuronal nitric oxide synthase (NOS-I) prevents binding of calmodulin.

Biol Chem 378: 851-857.