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Analysis of monoclonal antibody cross-reactivity with leukocytes from equids and cloning of CD28

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**vorgelegt von
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To my mother, brothers, wife and daughters

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ABBREVIATIONS

| | |
|-------------------------------------|--|
| aa | amino acid (s) |
| Ab | antibody |
| Act. PBMC | activated PBMC |
| Ag | Antigen |
| H+L | Heavy + Light chain |
| AP | Alkaline phosphatase |
| APC | Antigen Presenting Cell |
| Approx. | Approximate |
| bp | base pairs |
| BLAST | Basic Local Alignment Search Tool |
| BSA | bovine serum albumin |
| CD | cluster of differentiation |
| CDP | Disodium 2-chloro-5-(4-methoxyspiro{1,2-dioxetane-3,2'-(5'-chloro)-tricyclo [3.3.1.1 ^{3,7}]decan}-4-yl)-1-phenyl phosphate |
| CR2 | Complement receptor type 2 |
| CR3 | Complement receptor type 3 |
| GM-CSF | Granulocyte Monocyte colony-stimulating factors |
| DC | Dendritic cells |
| dH ₂ O | Distilled water |
| DL | Double labelling |
| DNA | Deoxyribonucleic acid |
| cDNA | complementary Deoxyribonucleic acid |
| DMSO | Dimethyl sulfoxide |
| dNTPs | deoxyribonucleoside triphosphate |
| ds | double stranded |
| EDTA | Ethylene Diamine Tetra Acetic acid |
| ELAWI | Equine leukocyte antigen workshop number one |
| ELAWII | Equine leukocyte antigen workshop number two |
| ELISA | Enzyme linked immunosorbent assay |
| Eq | Equine |
| IL | interleukin |
| WC | workshop cluster |
| EtOH | Ethanol |
| FACS | fluorescence-activated cell sorter |
| Fc | Fragment crystallizable part of antibody |
| FCS | Fetal calf serum |
| Fig. | Figure |
| FITC | Fluorescein isothiocyanate |
| FL-1 | Fluorescence-1 |
| FL-2 | Fluorescence-2 |
| FSC | Forward scatter |
| g | centrifugal force/gram |
| h | Hour |
| H ₂ O | Water |
| H ₂ O _{bidest.} | Bidistilled water |
| H ₂ O ₂ | Hydrogen peroxidase |
| HEPES | 4-(2-hydroxyethyl)-1-piperazine-1-ethanesulfonic acid |
| HLDA8 | 8 th human leukocyte differentiation antigen workshop |
| HSC | Haematopoietic stem cells |
| hu | human |
| ICAM | Intracellular adhesion molecule |
| iDC | Immature dendritic cells |
| IFN | Interferon |
| Ig | Immunoglobulin |
| IgA | Immunoglobulin-A |
| IgD | Immunoglobulin-D |
| IgE | Immunoglobulin-E |
| IgG | Immunoglobulin-G |

| | |
|-----------------|--|
| IgM | Immunoglobulin-M |
| IL-2R α | Interleukin-2 receptor alpha chain |
| IP | Immunoprecipitation |
| IPTG | Isopropyl- β -D-Thiogalactopyranoside |
| IUCN | The World Conservation Union, Gland, Switzerland |
| Kb | kilo-base |
| kDa | kilo Daltons |
| LB | Luria Bertani |
| LDL | Low density lipoproteins |
| LPS | Lipopolysaccharide |
| μ | micro |
| m | milli |
| M | Molar (mole per litre) |
| M Φ | Macrophage |
| mA | milli ampere |
| mAb | Monoclonal antibody |
| mAk | Monoklonale Antikörper |
| max. | Maximum |
| MHC | Major Histocompatibility Complex |
| min. | minute |
| ml | millilitre |
| M-MLV | Moloney Murine Leukemia Virus |
| MMR | Macrophage mannose receptor |
| Mo | monocytes |
| MoDC | Monocyte-derived dendritic cells |
| MoM Φ | Monocyte-derived macrophages |
| MOPS | 3-(N-morpholino) propanesulfonic acid |
| MPS | Mononuclear-phagocyte system |
| mRNA | messenger RNA |
| mu | mouse |
| MW | Molecular weight |
| ng | Nano gram |
| NK cells | Natural killer cells |
| nm | nanometer |
| OD | Optical density |
| ORF | Open Reading Frame |
| PBL | Peripheral blood lymphocytes |
| PBMo | Peripheral blood monocytes |
| PBMC | Peripheral blood mononuclear cells |
| PBS | Phosphate buffered saline |
| PCR | Polymerase Chain Reaction |
| PE | phycoerythrin |
| PHA | Phytohaemagglutinin |
| PMA | Phorbol-12-Myristate-13-Acetate |
| poly (I:C) acid | polyinosinic-polycytidylic acid |
| R | Receptor |
| RE | restriction enzyme |
| RNA | Ribonucleic acid |
| RNAse | Ribonuclease |
| rpm | Round per minute |
| RT | Reverse transcription |
| SDS | Sodium Dodecyl Sulphate |
| PAGE | Poly Acrylimde Gel Electrophoresis |
| Sp. | Species |
| SSC | Side scatter |
| TAE | Tris acetate EDTA |
| TBS | Tris buffered saline |
| TBST | Tris buffered saline with tween |
| Tc | cytotoxic T cells |
| TCA | Trichloroacetic acid |

| | |
|-------|--|
| TCR | T cell receptor |
| TEMED | Tetramethylethylenediamin |
| TfB | Transformation buffer |
| Th | T helper |
| TLR | Toll like receptor |
| Tm | Melting temperature |
| TNF | Tumour Necrosis Factors |
| U | Unit |
| UV | Ultraviolet light |
| V | Volt |
| vs | Versus |
| V/V | volume/volume |
| W | watt |
| WB | Western blot |
| W/V | Weight/volume |
| X-Gal | 5-bromo-4-chloro-3-indolyl-b-D-galactopyranoside |