



Cat nr AE00203

Product Datasheet

Mouse Monoclonal Antibody, clone MS4A1/3409 to:

CD20

B-lymphocyte antigen CD20; B-lymphocyte surface antigen B1; CD_antigen: CD20; Leukocyte surface antigen Leu-16; Membrane spanning 4-domains A1; Membrane-spanning 4-domains subfamily A member 1; B1; Bp35; CD20; CVID5; LEU-16; MS4A1; MS4A2; S7

Cellular localization Plasma membrane

Official Symbol (Gene) MS4A1
GenelD 931
SwissProt P11836

Confirmed Applications ICC, IHC, PA, WB
Positive controls tonsil, Raji

Aeonian Rating© 85

Purification By Protein A from bioreactor concentrate
Formulation 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)
 1mg IgG/ml in PBS (100ug or contact us for quotation)
Amount 20ug 100ug
Isotype Mouse IgG2b, kappa
Confirmed species reactivity Human
Immunogen Recombinant fragment around aa 213-297 of human CD20 protein (exact sequence is proprietary)
Epitope Cytoplasmic domain (within aa 213-297 region)

Storage instructions Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

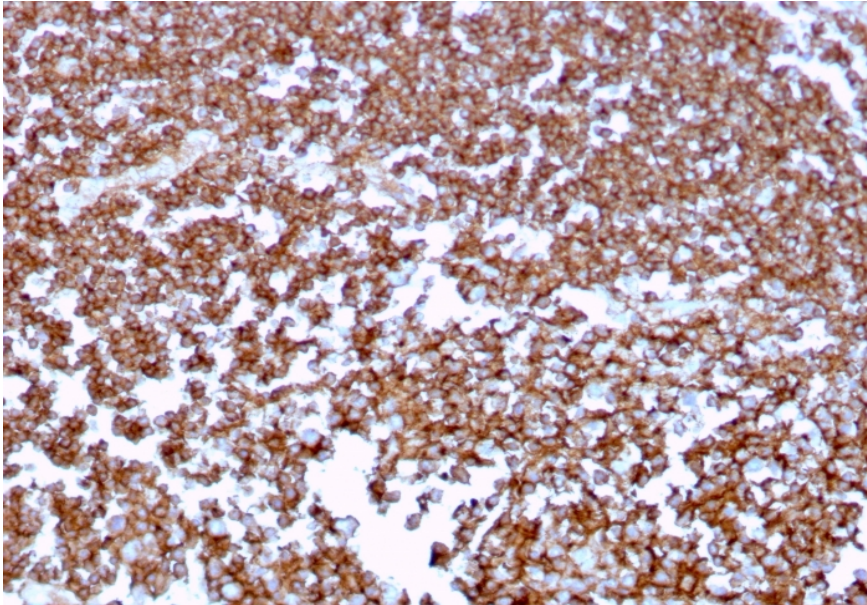
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

Product data:

ImmunoHistoChemistry (IHC):

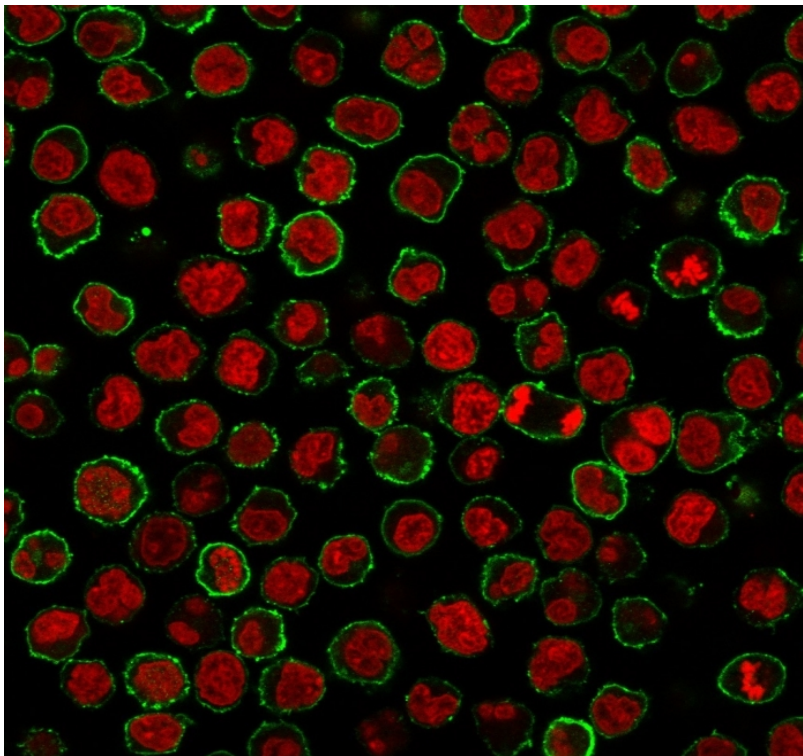
This product shows B-cell membrane staining in human tonsil sections. Recommended concentration: 0.3-1ug/ml



Formaldehyde-fixed, paraffin-embedded human tonsil stained with CD20 Mouse Monoclonal Antibody AE00203 at 0.5-1ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

ImmunoCytoChemistry (ICC):

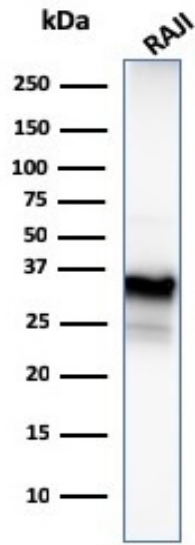
This product shows staining of plasma membranes in cell line Raji. Recommended concentration: 1-3ug/ml



Confocal microscopy of Raji stained with CD20 Mouse Monoclonal Antibody AE00203 at 1-2ug/ml (1h at ambient temp). Detection by CF488 (green) for the antibody and RedDot (red) for nuclear staining.

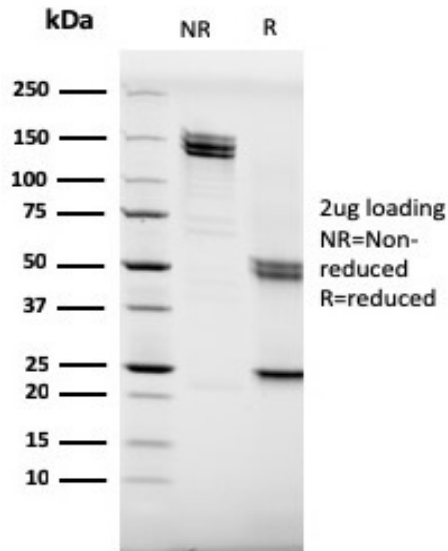
Western Blot (WB):

This product was successfully used to stain an approx. 35kDa band in human Raji lysates. Recommended concentration: 1-3ug/ml



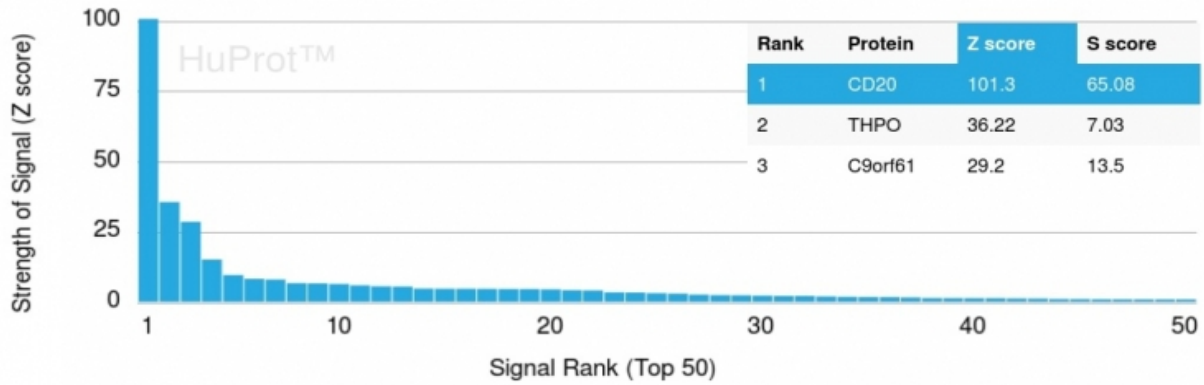
Western Blot of a Raji lysate (30ug) stained with CD20 Mouse Monoclonal Antibody AE00203 at 1ug/ml (1h at ambient temp). ECL staining by HRP.

SDS-PAGE Analysis of Purified CD20 Mouse Monoclonal Antibody AE00203. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00203 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 25kDa resp. (R). Note different sizes due to PTMs.

Specificity and selectivity of AE00203 to CD20 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed no closely related proteins.



Cross-reactivity assessment of CD20 Mouse Monoclonal Antibody AE00203 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).