



Recombinant Version of Classic Clone

Cat nr AE00327

Product Datasheet

Mouse Recombinant Antibody, rAb-1 to:

CD147, Basigin

Collagenase stimulatory factor; Extracellular matrix metalloproteinase inducer; Hepatoma-associated antigen; Leukocyte activation antigen M6; OK blood group antigen; Tumor cell-derived collagenase stimulatory factor; 5F7; Basigin; BSG; CD147; EMPRIN; EMMPRIN; EOK; HAb18G

Cellular localization Plasma membrane

Official Symbol (Gene) BSG
GenelD 682
SwissProt P35613

Confirmed Applications Blocking
Positive controls Erythrocytes

Aeonian Rating© 90

Purification By Protein A from bioreactor concentrate

Formulation 1 mg IgG/ml in PBS with 0.02% Proclin 300

Amount 200ug 1000ug

Isotype Mouse IgG1, kappa, new chimeric version of recombinant clone Ab-1

Confirmed species reactivity Human

Immunogen Purified recombinant extracellular domain of human CD147 / Basigin (aa138–323 according to NP_001719.2)

Epitope Extracellular domain (aa138-323)

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:

Biological activity

Blocking PfRH5–CD147 interaction:

The original clone Ab-1 was successfully used to block the interaction between the erythrocyte receptor CD147 (Basigin) and the PfRH5 ligand of parasite Plasmodium falciparum (causing malaria).

Zenonos ZA, Dummler SK, Müller-Siennerth N, Chen J, Preiser PR, Rayner JC, Wright GJ. Basigin is a druggable target for host-oriented antimalarial interventions. *J Exp Med*. 2015 Jul 27;212(8):1145-51. doi: 10.1084/jem.20150032. PMID: 26195724.

Ab-1-specific most recent literature:

Shilts J, Crozier TWM, Greenwood EJD, Lehner PJ, Wright GJ. No evidence for basigin/CD147 as a direct SARS-CoV-2 spike binding receptor. *Sci Rep*. 2021 Jan 11;11(1):413. doi: 10.1038/s41598-020-80464-1. PMID: 33432067.

Ulrich H, Pillat MM. CD147 as a Target for COVID-19 Treatment: Suggested Effects of Azithromycin and Stem Cell Engagement. *Stem Cell Rev Rep*. 2020 Jun;16(3):434-440. doi: 10.1007/s12015-020-09976-7. PMID: 32307653.

Galaway F, Yu R, Constantinou A, Prugnolle F, Wright GJ. Resurrection of the ancestral RH5 invasion ligand provides a molecular explanation for the origin of *P. falciparum* malaria in humans. *PLoS Biol*. 2019 Oct 15;17(10):e3000490. doi: 10.1371/journal.pbio.3000490. PMID: 31613878.

Aniweh Y, Gao X, Hao P, Meng W, Lai SK, Gunalan K, Chu TT, Sinha A, Lescar J, Chandramohanadas R, Li HY, Sze SK, Preiser PR. *P. falciparum* RH5-Basigin interaction induces changes in the cytoskeleton of the host RBC. *Cell Microbiol*. 2017 Sep;19(9). doi: 10.1111/cmi.12747. Epub 2017 May 9. PMID: 28409866.