Aeonian Biotech
Your choice for selective antibodies

Cat nr AE00187 **Product Datasheet**

Mouse Monoclonal Antibody, clone TACSTD2/2152 to:

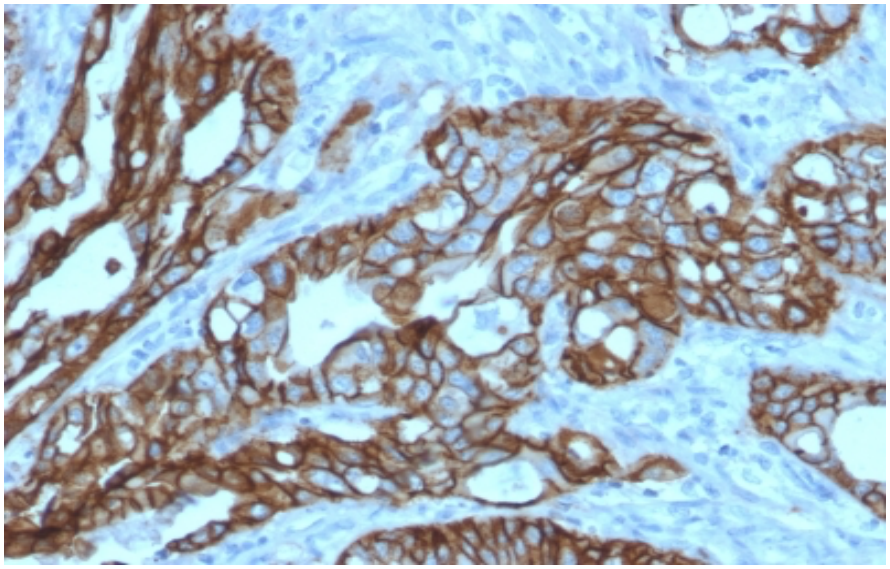
TROP2, TACSTD2

Tumor Associated Calcium Signal Transducer 2; Cell surface glycoprotein Trop-2; Membrane component chromosome 1 surface marker 1; Pancreatic carcinoma marker protein GA733-1; EGP-1; EGP1; GA733-1; GA7331; GP50; M1S1; TROP2

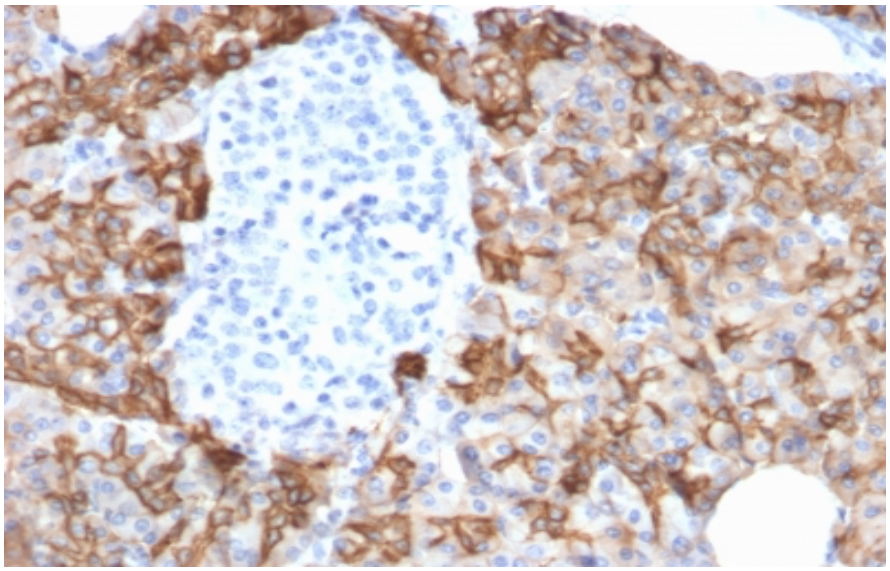
Cellular localization	plasma membrane, cell surface
Official Symbol (Gene)	TACSTD2
GeneID	4070
SwissProt	P09758
Confirmed Applications	ICC, IHC, PA
Positive controls	MCF7, colon carcinoma, pancreas carcinoma
Aeonian Rating©	82
Purification	By Protein G from bioreactor concentrate
Formulation	☐ 200ug 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 IgG1, kappa
Confirmed species reactivity	Human
Immunogen	Recombinant fragment around aa 31-274 of human TROP2 protein (exact sequence is proprietary)
Epitope	Extracellular domain (within aa 31-274 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 plasma membrane staining of malignant cells in sections of human colon carcinoma and of human pancreas carcinoma. Recommended concentration: 1-3ug/ml

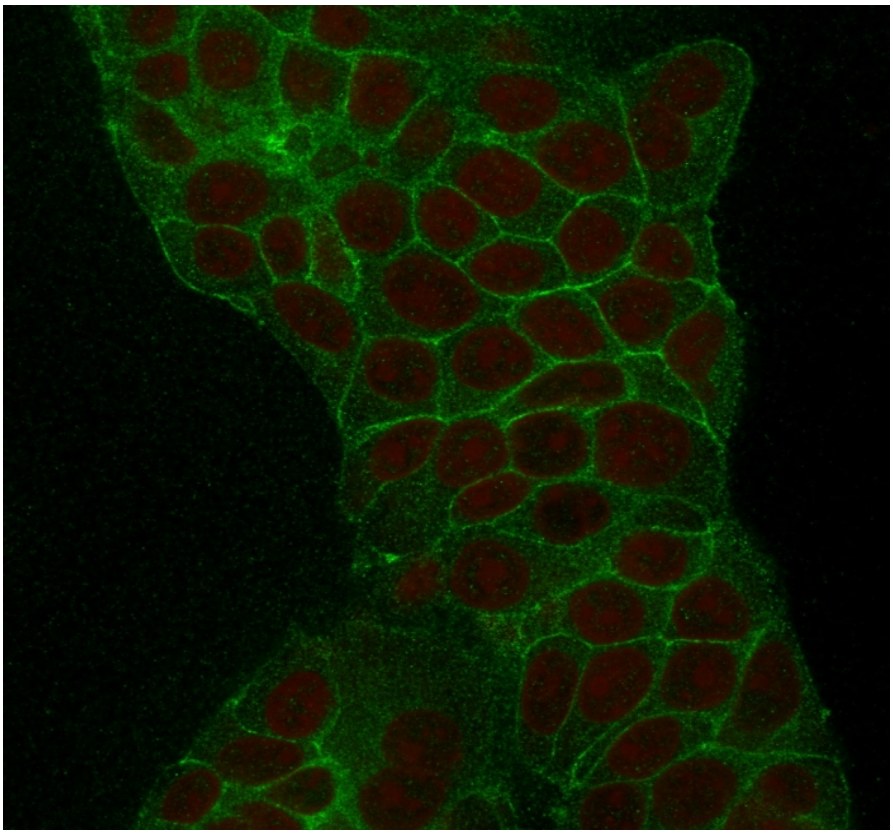


Formaldehyde-fixed, paraffin-embedded human colon carcinoma stained with TROP2 Mouse Monoclonal Antibody AE00187 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.



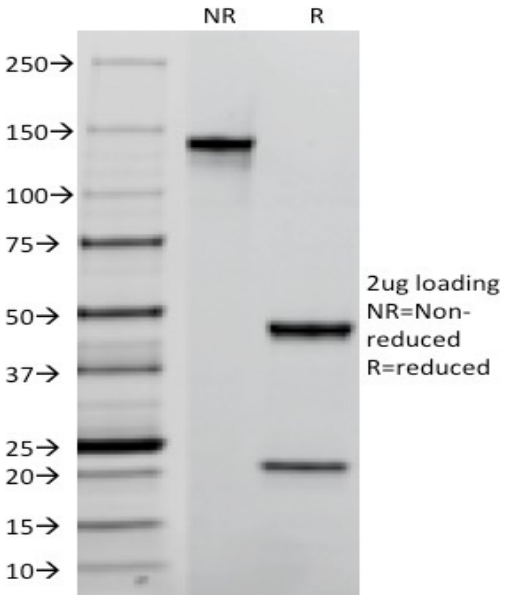
Formaldehyde-fixed, paraffin-embedded human pancreas carcinoma stained with TROP2 Mouse Monoclonal Antibody AE00187 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: Boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

ImmunoCytoChemistry (ICC):
This product was successfully used to stain plasma membranes in MCF7. Recommended concentration: 1-3ug/ml



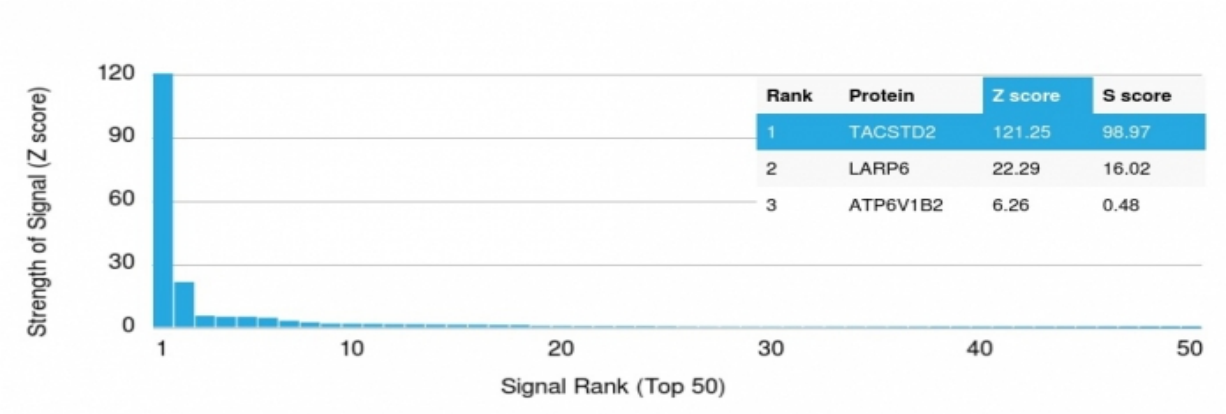
MCF7 cells stained with TROP2 Mouse Monoclonal Antibody AE00187 at 1-2ug/ml for 1h at RT. Detection by confocal microscopy using CF488 (green) for the antibody and RedDot (red) for nuclear staining.

SDS-PAGE Analysis of Purified TROP2 Mouse Monoclonal Antibody AE00187. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00187 under non-reduced and reduced conditions, showing intact IgG at around 140kDa (NR) and intact heavy and light chains at 48kDa and 22kDa resp. (R).

Specificity and selectivity of AE00187 to TROP2 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search against H. sapiens revealed the following closely related other protein: EpCAM. This protein was part of the array used and showed no cross-reactivity signals.



Cross-reactivity assessment of TROP2 Mouse Monoclonal Antibody AE00187 (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).