

Rabbit anti-Human, Mouse MUC4 Polyclonal Antibody | anti-MUC4 antibody

Anti-MUC4 Antibody Picoband

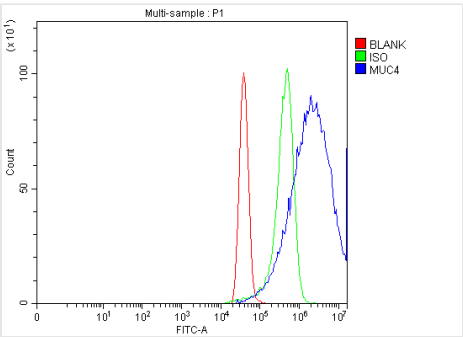
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126162	Rabbit	Human, Mouse	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

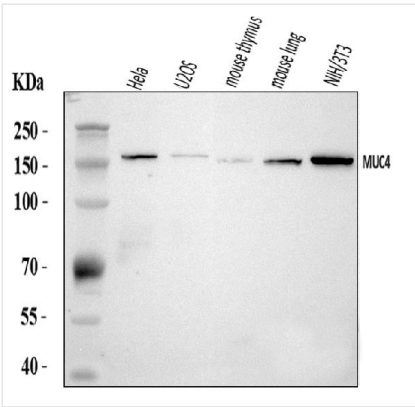
MUC4; Polyclonal Antibody; Anti-MUC4 Antibody Picoband; anti-MUC4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Natural and recombinant Rat Cxcl2
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-MUC4 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Assay Type	Sandwich
Samples	Cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA)
Detection Range	15.6 pg/ml - 1,000 pg/ml
Sensitivity	<10 pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of MCF-7 cells using anti-MUC4 antibody (AAA126162). Overlay histogram showing MCF-7 cells stained with AAA126162 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MUC4 Antibody (AAA126162, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of MUC4 using anti-MUC4 antibody (AAA126162). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human U20S whole cell lysates, Lane 3: mouse thymus tissue lysates, Lane 4: mouse lung tissue lysates, Lane 5: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MUC4 antigen affinity purified polyclonal antibody (#AAA126162) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MUC4 at approximately 170 kDa. The expected band size for MUC4 is at 232 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MUC4 antibody	Background: MIP is a member of the aquaporin family of membrane-bound water channels. MIP family proteins are thought to contain 6 TM domains. Sequence analysis suggests that the proteins may have arisen through tandem, intragenic duplication from an ancestral protein that contained 3 TM domains. Major intrinsic protein (MIP, also called MP26) is the predominant fiber cell membrane protein of the ocular lens. The major intrinsic protein (MIP) of the vertebrate eye lens is the first identified member of a sequence-related family of cell-membrane proteins that appears to have evolved by gene duplication. Several members of the MIP family transport water (aquaporins), glycerol and other small molecules in microbial, plant and animal cells.
	Principle of the Assay: The Quick Picokine™ Rat Cxcl2 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Rat Cxcl2 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA). It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Rat Cxcl2 with immunogen: Expression system for standard: E.coli; Immunogen sequence: S32-N100. To measure Rat Cxcl2, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product is linearly proportional to Rat Cxcl2 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Rat Cxcl2 in the sample.
Product Categories/Family for anti-MUC4 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	257471027
NCBI GeneID	4585
NCBI Accession #	NP_060876.5

NCBI GenBank Nucleotide #	NM_018406.6
UniProt Accession #	Q99102; O95938; Q9GZM2; Q9GZV6; Q9H481; Q9H482; Q9H483; Q9H484; Q9H485; Q9H486; Q9H487; Q9H4D6
Molecular Weight	231,518 Da
NCBI Official Full Name	mucin-4 isoform a
NCBI Official Synonym Full Names	mucin 4, cell surface associated
NCBI Official Symbol	MUC4
NCBI Official Synonym Symbols	ASGP; MUC-4; HSA276359
NCBI Protein Information	mucin-4; testis mucin; tracheobronchial mucin; ascites sialoglycoprotein; mucin 4, tracheobronchial; pancreatic adenocarcinoma mucin
UniProt Protein Name	Mucin-4
UniProt Gene Name	MUC4
UniProt Synonym Gene Names	MUC-4; ASGP; ASGP-1; ASGP-2
UniProt Entry Name	MUC4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/muc4-antibody-flow-cytometry-western-blot-elisa/126162>