

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Mesothelin in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human MPF is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 618923
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Mesothelin Glu296-Asp580 Accession # AAH09272
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
ELISA	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Mesothelin, also known as CAK1 and ERC, is derived from a 70 kDa precursor that also includes Megakaryocyte Potentiating Factor (MPF) (1-3). The 70 kDa precursor is expressed on the cell surface where it is cleaved at a dibasic proteolytic site to release the 32 kDa glycosylated MPF (3, 4). MPF is a cytokine that potentiates IL-3 induced megakaryocyte colony formation (2, 5). The term Mesothelin refers to the 40 kDa glycosylated protein which remains attached to the cell surface via a GPI linkage. Alternate splicing generates additional Mesothelin isoforms that have either an eight amino acid insertion following Ser408 or a substituted C-terminal region with no GPI anchor (6). Within aa 29-580, human Mesothelin shares 59% sequence identity with mouse and rat Mesothelin. Mesothelin is normally expressed on mesothelial cells in the pleura, pericardium, and peritoneum as well as in the developing and postnatal pancreas (1, 7). It is upregulated in mesotheliomas and a range of carcinomas and adenomas (8-11). Mesothelin promotes tumor cell proliferation, migration, anchorage-independent growth, and tumor progression (10, 12). It is coexpressed with the tumor antigen CA125/MUC16 on advanced ovarian adenocarcinomas and interacts with this molecule to support cell adhesion (13). A soluble form of Mesothelin is released from tumor cells into the serum or tissue effusions (11, 14, 15).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.