

32-20552: Recombinant Human Mesothelin(Discontinued)

Alternative Name : MPF, MSLN, SMRP, CAK1 antigen, ERC, Pre-pro-megakaryocyte-potentiating factor

Description

Source:CHO cells

Originally identified as a differentiation antigen of mesotheliomas, ovarian cystadenocarcinomas, and pancreatic adenocarcinomas, mesothelin is a glycosylphosphatidylinositol (GPI)-anchored, cell-surface glycoprotein predominantly secreted by cells of the mesothelium. Although mesothelin is expressed at restricted levels by normal mesothelial cells of the pleural, pericardial, and peritoneal membranes, aberrant expression has been documented in the aforementioned cancers, as well as in endometrioid uterine adenocarcinomas and squamous cell carcinomas of the esophagus, stomach, lung, and cervix. Proteolytic cleavage of mesothelin yields a soluble, polypeptide fragment-designated megakaryocyte-potentiating factor (MPF) based on its ability to stimulate megakaryocyte colony-forming activity of murine IL-3 in murine bone marrow cell cultures. Originally isolated from the HPC-Y5 pancreatic cell line, MPF has been suggested to play a role in the proliferation and differentiation of megakaryocytes, and the regulation of resultant platelet production. While the biological functions of both mesothelin and MPF remain speculative, high levels of expression in cancerous tissues, compared to limited distribution in normal tissues, strongly suggests their involvement in tumorigenesis. Both have been demonstrated to promote tumor cell proliferation, migration, anchorage-independent growth, and tumor progression, demonstrating their involvement in heterotypic cell adhesion and the metastatic spread of cancer. The CHO cell-derived Recombinant Human Mesothelin is a glycoprotein containing 327 amino acid residues, and has a calculated molecular weight of approximately 36.4 kDa. As a result of glycosylation, Recombinant Human Mesothelin migrates with an apparent molecular mass of approximately 40-45 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

Product Info

Amount : 10 µg / 50 µg

Purification : Purity:>= 95% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : EVEKTACPSG KKAREIDESL IFYKKWELEA CVDAALLATQ MDRVNAIPFT YEQLDVLKHK LDELYPQGYP
ESVIQHLGYL FLKMSPEDIR KWNVTSLETL KALLEVNKGGH EMSPQVATLI DRFVKGRGQL DKDTLDTLTA
FYPGYLCSLS PEELSSVPPS SIWAVRPQDL DTC DPRQLDV LYPKARLAFQ NMNGSEYFVK IQSFLGGAPT
EDLKALSQQN VSMDLATFMK LRTDAVLPLT VAEVQKLLGP HVEGLKAEER HRPVRDWILR QRQDDLDTLG
LGLQGGIPNG YLVLDLSMQE ALSGTPCLLG PGPVLTVLAL LLASTLA

Application Note

Determined by its ability to bind immobilized recombinant CA125/MUC16 in a functional ELISA.