

32-20551: Recombinant Human MPF(Discontinued)

Alternative Name : Mesothelin, MSLN, SMRP, CAK1 antigen, 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 endometrial 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 interleukin-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 MPF is the 250 amino acid-length fragment of the Mesothelin sequence, and has a calculated molecular weight of approximately 26.7 kDa. As a result of glycosylation, Recombinant Human MPF migrates with an apparent molecular mass of approximately 32-33 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 : LAGETGQEAA PLDGVLANPP NISSLSRQL LGFPCAQVSG LSTERVRELA VALAQKNVKL STEQLRCLAH
RLSEPPEDLD ALPLDLLLFL NPDAFSGPQA CTRFFSRITK ANVDLLPRGA PERQRLLPAA LACWGVGRSL
LSEADVRLG GLACDLPGRF VAESAQVLLP RLVSCPGPLD QDQQAARAA LQGGGPPYGP
PSTWSVSTMD ALRGLLPVLG QPIIRSIPQG IVAAWRQRSS RDPSWRQPER