

Recombinant Human Seprase(FAP)partial

Catalog No: #AP70292

Package Size: #AP70292-1 20ug #AP70292-2 100ug #AP70292-3 1mg

Description

Product Name	Recombinant Human Seprase(FAP)partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:26-760aaSequence Info:partial
Other Names	170KDA melanoma membrane-bound gelatinase2
Accession No.	Q12884
Calculated MW	112 kDa
Tag Info	N-terminal GST-tagged
Target Sequence	LRPSRVHNSEENTMRALTLKDILNGTFSYKTFPPNWISGQEYLHQSADNNIVLYNIETGQSYTILSNRTMKSVN ASNYGLSPDRQFVYLESYSLWRYSYTATYYIYDLSNGEFVRGNELPRPIQYLCWSPVGSKLAYVYQNNIYL KQRPGDPPFQITFNGRENKIFNGIPDWVYEEEMLATKYALWWSPNGKFLAYAEFNDTDIPVIAYSYYGDEQYP RTINIPYPKAGAKNPVVRIFIIDTTYPAYVGPQEVVPAMIASSDYYFSWLTWVTDERVCLQWLKRVQNVSVLSI CDFREDWQTWDCPKTQEHIIESRTGWAGGFFVSTPVFSYDAISYYKIFSDKDGXKHIHYIKDTVENAIQITSGK WEAINIFRVTDQSLFYSSNEFEYEPGRRNIYRISIGSYPPSKKCVTCHLRKERCQYYTASFSDYAKYYALVCYG PGIPISTLHDGRDQEIKILEENKELENALKNIQLPKEEIKKLEVDEITLWYKMILPPQFDRSKKYPLLIQVYGGPC SQSVRSVFAVNWISYLASKEGMVIALVDGRGTAFGQDKLLYAVYRKLGVYEVEDQITAVRKFIEMGFIDEKRIAI WGWSYGGYVSSLALASGTGLFKCGIAVAPVSSWEYYASVYTERFMGLPTKDDNLEHYKNSTVMARAEYFRN VDYLLIHGTADDNVHFQNSAQIAKALVNAQVDFQAMWYSQDNHGLSGLSTNHLYTHMTHFLKQCFSLSD
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Cell surface glycoprotein serine protease that participates in Extracellular domain matrix degradation and involved in many cellular processes including tissue remodeling, fibrosis, wound healing, inflammation and tumor growth. Both plasma membrane and soluble forms exhibit post-proline cleaving endopeptidase activity, with a marked preference for Ala,Ser-Gly-Pro-Ser,Asn,Ala consensus sequences, on substrate such as alpha-2-antiplasmin SERPINF2 and SPRY2 . Degrade also gelatin, heat-denatured type I collagen, but not native collagen type I and IV, vitronectin, tenascin, laminin, fibronectin, fibrin or casein . Have also dipeptidyl peptidase activity, exhibiting the ability to hydrolyze the prolyl bond two residues from the N-terminus of synthetic dipeptide substrates provided that the penultimate residue is proline, with a preference for Ala-Pro, Ile-Pro, Gly-Pro, Arg-Pro and Pro-Pro . Natural neuropeptide hormones for dipeptidyl peptidase are the neuropeptide Y (NPY), peptide YY (PYY), substance P (TAC1) and brain natriuretic peptide 32 (NPPB) . The plasma membrane form, in association with either DPP4, PLAU or integrins, is involved in the pericellular proteolysis of the Extracellular domain matrix (ECM), and hence promotes cell adhesion, migration and invasion through the ECM. Plays a role in tissue remodeling during development and wound healing. Participates in the cell invasiveness towards the ECM in malignant melanoma cancers. Enhances tumor growth progression by increasing angiogenesis, collagen fiber degradation and apoptosis and by reducing antitumor response of the immune system. Promotes glioma cell invasion through the brain parenchyma by degrading the proteoglycan brevican. Acts as a tumor suppressor in melanocytic cells through

regulation of cell proliferation and survival in a serine protease activity-independent manner.

References

Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Hillier L.W., Graves T.A., Fulton R.S., Fulton L.A., Pepin K.H., Minx P., Wagner-McPherson C., Layman D., Wylie K., Sekhon M., Becker M.C., Fewell G.A., Delehaunty K.D., Miner T.L., Nash W.E., Krenitzki C., Oddy L., Du H., Sun H., Bradshaw-Cordum H., Ali J., Carter J., Cordes M., Harris A., Isak A., van Brunt A., Nguyen C., Du F., Courtney L., Kalicki J., Ozersky P., Abbott S., Armstrong J., Belter E.A., Caruso L., Cedroni M., Cotton M., Davidson T., Desai A., Elliott G., Erb T., Fronick C., Gaige T., Haakenson W., Haglund K., Holmes A., Harkins R., Kim K., Kruchowski S.S., Strong C.M., Grewal N., Goyea E., Hou S., Levy A., Martinka S., Mead K., McLellan M.D., Meyer R., Randall-Maher J., Tomlinson C., Dauphin-Kohlberg S., Kozlowicz-Reilly A., Shah N., Swearengen-Shahid S., Snider J., Strong J.T., Thompson J., Yoakum M., Leonard S., Pearman C., Trani L., Radionenko M., Waligorski J.E., Wang C., Rock S.M., Tin-Wollam A.-M., Maupin R., Latreille P., Wendl M.C., Yang S.-P., Pohl C., Wallis J.W., Spieth J., Bieri T.A., Berkowicz N., Nelson J.O., Osborne J., Ding L., Meyer R., Sabo A., Shotland Y., Sinha P., Wohldmann P.E., Cook L.L., Hickenbotham M.T., Eldred J., Williams D., Jones T.A., She X., Ciccarelli F.D., Izaurralde E., Taylor J., Schmutz J., Myers R.M., Cox D.R., Huang X., McPherson J.D., Mardis E.R., Clifton S.W., Warren W.C., Chinwalla A.T., Eddy S.R., Marra M.A., Ovcharenko I., Furey T.S., Miller W., Eichler E.E., Bork P., Suyama M., Torrents D., Waterston R.H., Wilson R.K. *Nature* 434:724-731(2005) Research Topic: Cancer

Note: This product is for in vitro research use only and is not intended for use in humans or animals.