Recombinant Human FAP/Seprase Protein (His Tag)

Catalog Number: PKSH031593

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

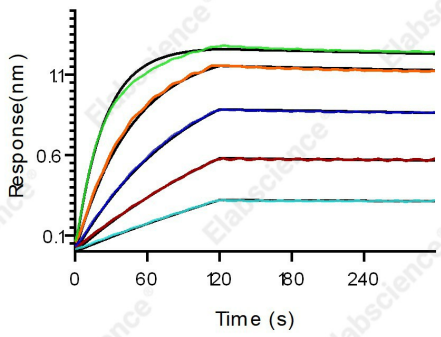
Description

Species	Human
Source	HEK293 Cells-derived Human FAP/Seprase protein Leu 26-Asp 760, with an N-terminal His
Calculated MW	87.2 kDa
Observed MW	90 kDa
Accession	Q12884-1
Bio-activity	Measured by its ability to convert the substrate benzyloxycarbonyl-Gly-Pro-7-amido-4-methylcoumarin (Z-GP-AMC) to Z-Gly-Pro and 7-amino-4-methylcoumarin (AMC). The specific activity is > 1200 pmol/min/μg

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Supplied as sterile 25 mM Tris, 250 mM NaCl, pH 8.2 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Loaded anti-FAP antibody, human IgG1 on proA Biosensor, can bind Recombinant Human FAP Protein, His Tag (Cat: PKSH031593) with an affinity constant of 0.396 nM as determined in BLI assay (Sartorius Octet RED384) .

Background

Seprase, also known as 170 kDa melanoma membrane-bound gelatinase, Fibroblast activation protein alpha, Integral membrane serine protease and FAP, is a single-pass type II membrane protein which belongs to thepeptidase S9B family. Seprase/FAP is found in cell surface lamellipodia, invadopodia and on shed vesicles. Seprase/FAP appears to act as a proteolytically active 170-kDa dimer, consisting of two 97-kDa subunits. It is a member of the group type II integral serine proteases, which includes dipeptidyl peptidase IV (DPPIV/CD26) and related type II transmembrane prolyl serine peptidases, which exert their mechanisms of action on the cell surface. Seprase/FAP colocalized with DPP4 on endothelial cells of capillary-like microvessels but not large vessels within invasive breast ductal carcinoma. DPP4 and seprase exhibit multiple functions due to their abilities to form complexes with each other and to interact with other membrane-associated molecules. In association with DPP4, Seprase/FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. Seprase/FAP has a dual function in tumour progression. The proteolytic activity of Seprase has been shown to promote cell invasiveness towards the ECM and also to support tumour growth and proliferation. Seprase/FAP may have a role in tissue remodeling during development and wound healing, and may contribute to invasiveness in malignant cancers.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com