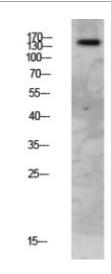


Anti-FAP-1 antibody



Description Rabbit polyclonal to FAP-1.

Model STJ99634

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Immunogen Synthesized peptide derived from human FAP-1.

Gene ID 2191

Gene Symbol <u>FAP</u>

Dilution range WB 1:500-2000ELISA 1:10000-20000

Specificity This antibody detects endogenous levels of FAP-1.

Tissue Specificity Expressed in adipose tissue. Expressed in the dermal fibroblasts in the fetal

skin. Expressed in the granulation tissue of healing wounds and on reactive stromal fibroblast in epithelial cancers. Expressed in activated fibroblast-like synoviocytes from inflamed synovial tissues. Expressed in activated hepatic stellate cells (HSC) and myofibroblasts from cirrhotic liver, but not detected in normal liver. Expressed in glioma cells (at protein level). Expressed in

glioblastomas and glioma cells. Isoform 1 and

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Prolyl endopeptidase FAP 170 kDa melanoma membrane-bound gelatinase

Dipeptidyl peptidase FAP Fibroblast activation protein alpha FAPalpha Gelatine degradation protease FAP Integral membrane serine protease Post-pr

Molecular Weight 150 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Function

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:3590OMIM:600403</u>

Alternative Names Prolyl endopeptidase FAP 170 kDa melanoma membrane-bound gelatinase

Dipeptidyl peptidase FAP Fibroblast activation protein alpha FAPalpha

Gelatine degradation protease FAP Integral membrane serine protease Post-pr

Cell surface glycoprotein serine protease that participates in extracellular

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 collager

SERPINF2 and SPRY2 . Degrade also gelatin, heat-denatured type I collagen, but not native collagen type I and IV, vibronectin, 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, PLAUR or integrins, is involved in the pericellular

proteolysis of the extracellular 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.

Cellular Localization

Prolyl endopeptidase FAP: Cell surface Cell membrane Cell projection, lamellipodium membrane Cell projection, invadopodium membrane Cell projection, ruffle membrane Membrane. Localized on cell surface with lamellipodia and invadopodia membranes and on shed vesicles. Colocalized with DPP4 at invadopodia and lamellipodia membranes of migratory activated endothelial cells in collagenous matrix. Colocalized with DPP4 on endothelial cells of capillary-like microvessels but not large vessels within invasive breast ductal carcinoma. Anchored and enriched preferentially by integrin

alpha-3/beta-1 at invadopodia, plasma membrane protrusions that correspond to sites of cell invasion, in a collagen-dependent manner. Localized at plasma and ruffle membranes in a collagen-independent manner. Colocalized with PLAUR preferentially at the cell surface of invadopodia membranes in a cytoskeleton-, integrin- and vitronectin-dependent manner. Concentrated at invadopodia membranes, specialized protrusions of the ventral plasma membrane in a fibrobectin-dependent manner. Colocalizes with extracellular components (ECM), such as collagen fibers and fibronectin. Antiplasmin-cleaving enzyme FAP, soluble form: Secreted. Found in blood plasma and serum. Isoform 2: Cytoplasm

Post-translational Modifications

N-glycosylated. The N-terminus may be blocked.

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