



Rabbit Anti-FAPA antibody

SL5758R

Product Name:	FAPA
Chinese Name:	成纤维细胞激活蛋白 α 抗体
Alias:	Fibroblast activation protein, alpha; 170 kDa melanoma membrane bound gelatinase; 170 kDa melanoma membrane-bound gelatinase; DPPIV; FAP; Fibroblast activation protein alpha; Integral membrane serine protease; SEPR_HUMAN; Prolyl endopeptidase FAP; 170 kDa melanoma membrane-bound gelatinase; Dipeptidyl peptidase FAP; FAPalpha; Gelatine degradation protease FAP; Integral membrane serine protease; Post-proline cleaving enzyme; Serine integral membrane protease; SIMP; Surface-expressed protease; Seprase; Antiplasmin-cleaving enzyme FAP, soluble form; APCE.
文献引用 PubMed :	<p>Specific References(1) SL5758R has been referenced in 1 publications.</p> <p>[IF=6.72]Zhang, Bo, et al. "Enhanced anti-tumor activity of EGFP-EGF1-conjugated nanoparticles by a multi-targeting strategy." ACS Applied Materials & Interfaces (2016).IHC-F;Mouse.</p> <p style="text-align: right;">PubMed:26890991</p>
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3 μ g/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	88kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FAPA:311-

	410/760<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>The protein encoded by this gene is a homodimeric integral membrane gelatinase belonging to the serine protease family. It is selectively expressed in reactive stromal fibroblasts of epithelial cancers, granulation tissue of healing wounds, and malignant cells of bone and soft tissue sarcomas. This protein is thought to be involved in the control of fibroblast growth or epithelial-mesenchymal interactions during development, tissue repair, and epithelial carcinogenesis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2014]</p> <p>Function: 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 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) (PubMed:21314817). 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.</p> <p>Subunit: Homodimer; homodimerization is required for activity of both plasma membrane and soluble forms. The monomer is inactive. Heterodimer with DPP4. Interacts with</p>

PLAUR; the interaction occurs at the cell surface of invadopodia membranes. Interacts with ITGB1. Interacts with ITGA3. Associates with integrin alpha-3/beta-1; the association occurs in a collagen-dependent manner at the cell surface of invadopodia membranes.

Subcellular Location:

Prolyl endopeptidase FAP: Cell surface. Cell membrane. Cell projection, lamellipodium membrane; Single-pass type II membrane protein. Cell projection, invadopodium membrane; Single-pass type II membrane protein. Cell projection, ruffle membrane; Single-pass type II membrane protein. Membrane {ECO:0000269|PubMed:2172980}; Single-pass type II membrane protein {ECO:0000255}. Note=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 fibroectin-dependent manner. Colocalizes with extracellular components (ECM), such as collagen fibers and fibronectin. Antiplasmin-cleaving enzyme FAP, soluble form: Secreted. Note=Found in blood plasma and serum. Isoform 2: Cytoplasm

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 isoform 2 are expressed in melanoma, carcinoma and fibroblast cell lines.

Post-translational modifications:

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

Similarity:

Belongs to the peptidase S9B family.

SWISS:
Q12884

Gene ID:
2191

Database links:

[Entrez Gene: 2191](#)Human

[Entrez Gene: 14089](#)Mouse

[Entrez Gene: 192203](#)Rat

[Olim: 600403](#)Human

[SwissProt: Q12884](#)Human

[SwissProt: P97321](#)Mouse

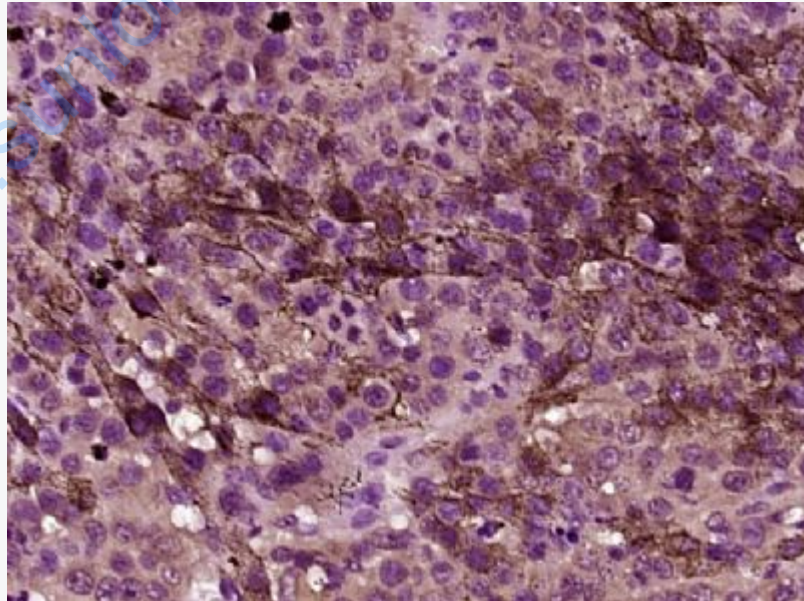
[Unigene: 654370](#)Human

[Unigene: 41816](#)Mouse

Important Note:

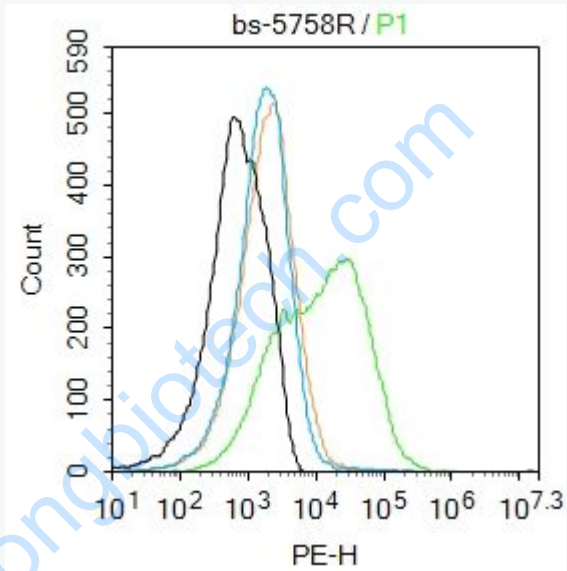
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Picture:



Paraformaldehyde-fixed, paraffin embedded (Human melanoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase

by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FAPA) Polyclonal Antibody, Unconjugated (SL5758R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: Mouse kidney.

Primary Antibody (green line): Rabbit Anti-FAPA antibody (SL5758R)

Dilution: 3µg /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1µg /test.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room

	temperature. Acquisition of 20,000 events was performed.
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