

### Product datasheet

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# ARG59472 anti-FAP / Fibroblast activation protein antibody

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Rabbit Polyclonal antibody recognizes FAP / Fibroblast activation protein

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name FAP / Fibroblast activation protein

Species Human

Immunogen Synthetic peptide derived from Human FAP / Fibroblast activation protein.

Conjugation Un-conjugated

Alternate Names Fibroblast activation protein alpha; SIMP; Seprase; Integral membrane serine protease; Surface-

expressed protease; EC 3.4.21.26; Dipeptidyl peptidase FAP; 170 kDa melanoma membrane-bound gelatinase; EC 3.4.14.5; APCE; Serine integral membrane protease; DPPIV; EC 3.4.21.-; FAPalpha; Gelatine degradation protease FAP; Post-proline cleaving enzyme; Prolyl endopeptidase FAP; FAPA

#### **Application Instructions**

Application table	Application	Dilution	
	IHC-P	1:50 - 1:200	
	WB	1:500 - 1:2000	
Application Note		* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 90 kDa		

#### **Properties**

Form Liquid

Purification Affinity-chromatography

Buffer PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

FAP

Gene Full Name

fibroblast activation protein, alpha

Background

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]

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, heatdenatured 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. [UniProt]

Highlight

Related products:

Fibroblast activation protein antibodies; Fibroblast activation protein ELISA Kits; Fibroblast activation protein Duos / Panels; Anti-Rabbit IgG secondary antibodies;

Related news:

New antibody panels for Myofibroblasts and CAFs

Calculated Mw

88 kDa

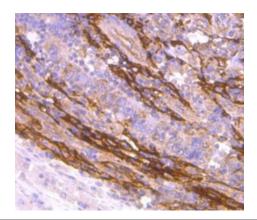
PTM

 $\hbox{N-glycosylated}.$ 

The N-terminus may be blocked. [UniProt]

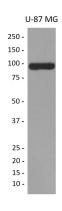
Cellular Localization

Prolyl endopeptidase FAP: Cell surface. Cell membrane; Single-pass type II membrane protein. 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. [UniProt]



## ARG59472 anti-FAP / Fibroblast activation protein antibody IHC-P image $\,$

Immunohistochemistry: Paraffin-embedded Human colon cancer stained with ARG59472 anti-FAP / Fibroblast activation protein antibody. Counter stained with hematoxylin.



### ARG59472 anti-FAP / Fibroblast activation protein antibody WB image $\,$

Western blot: U-87 MG cell lysate stained with ARG59472 anti-FAP  $\!\!/$  Fibroblast activation protein antibody.