

FAP α (H-56): sc-135069

BACKGROUND

FAP α , or Seprase, is a 760 amino acid protein encoded by the human gene FAP and belongs to the peptidase S9B family. FAP α may have a role in tissue remodeling during development and wound healing so it is possible FAP α may contribute to invasiveness of malignant cancers. It degrades gelatin and heat-denatured type I and type IV collagen, but not native type I or type IV collagen. It also does not cleave laminin, fibronectin, fibrin or casein. FAP α is a single-pass type II membrane protein found on cell surface lamellipodia, invadopodia and on shed vesicles. FAP α is usually found as a glycosylated homodimer, or heterodimer with DPP4. The FAP α monomer is an inactive form.

REFERENCES

1. Aertgeerts, K., et al. 2005. Structural and kinetic analysis of the substrate specificity of human fibroblast activation protein α . *J. Biol. Chem.* 280: 19441-19444.
2. Kelly, T. 2005. Fibroblast activation protein α and dipeptidyl peptidase IV (CD26): cell-surface proteases that activate cell signaling and are potential targets for cancer therapy. *Drug Resist. Updat.* 8: 51-58.
3. Dolznig, H., et al. 2005. Characterization of cancer stroma markers: in silico analysis of an mRNA expression database for fibroblast activation protein and endosialin. *Cancer Immun.* 5: 10-10.

CHROMOSOMAL LOCATION

Genetic locus: FAP (human) mapping to 2q24.2; Fap (mouse) mapping to 2 C1.3.

SOURCE

FAP α (H-56) is a rabbit polyclonal antibody raised against amino acids 544-599 mapping near the C-terminus of FAP α of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

FAP α (H-56) is recommended for detection of FAP α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FAP α (H-56) is also recommended for detection of FAP α in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FAP α siRNA (h): sc-62292, FAP α siRNA (m): sc-62293, FAP α shRNA Plasmid (h): sc-62292-SH, FAP α shRNA Plasmid (m): sc-62293-SH, FAP α shRNA (h) Lentiviral Particles: sc-62292-V and FAP α shRNA (m) Lentiviral Particles: sc-62293-V.

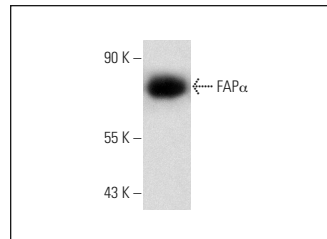
Molecular Weight of FAP α : 88 kDa.

Positive Controls: mouse skin extract: sc-364251.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FAP α (H-56): sc-135069. Western blot analysis of FAP α expression in mouse skin tissue extract.

SELECT PRODUCT CITATIONS

1. De Francesco, E.M., et al. 2013. HIF-1 α /GPER signaling mediates the expression of VEGF induced by hypoxia in breast cancer associated fibroblasts (CAFs). *Breast Cancer Res.* 15: R64.
2. Alcalay, Y., et al. 2013. Popeye domain containing 1 (Popdc1/Bves) is a caveolae-associated protein involved in ischemia tolerance. *PLoS ONE* 8: e71100.
3. De Marco, P., et al. 2014. GPER1 is regulated by Insulin in cancer cells and cancer-associated fibroblasts. *Endocr. Relat. Cancer* 21: 739-753.
4. Lappano, R., et al. 2015. A calixpyrrole derivative acts as a GPER antagonist: mechanisms and models. *Dis. Model Mech.* 8: 1237-1246.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.


 MONOS
Satisfation
Guaranteed

Try **FAP α (SS-13): sc-100528**, our highly recommended monoclonal alternative to FAP α (H-56).