Anti-Human FAP Antibody [PSH26-55] - BSA and Azide free (Capture)

HA725499

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Cap)
Clone number:	PSH26-55

Description: FAP (fibroblast activation protein) is a cell surface glycoprotein and serine protease that is expressed primarily in fetal mesenchymal tissues and epithelial cancer fibroblasts. In cancer, FAP functions to promote cellular proliferation. In embryonic development, FAP functions to remodel developing tissues. FAP acts as an integral membrane gelatinase composed of N-glycosylated proteolytically inactive subunits. FAP expression on chondrocyte membranes is upregulated by the combination of the cytokines IL-1 and OSM and has been shown to increase in osteoarthritic patients. This expression is co-localized with MMP-1and MMP-13 as well as CD44 (variants v3 and v7/8). Mice that lack all copies of the FAP gene have been found to be fertile and to have developmental defects or change in cancer susceptibility.

Immunogen: Recombinant protein within Human FAP aa 26-760 (HA211419).

Positive control: Recombinant Human FAP protein (HA211419).

Subcellular location: Cell membrane. Cell surface.

Database links: SwissProt: Q12884 Human

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH26-56] to Human FAP (Detecor) (HA725500) and Recombinant Human FAP protein (HA211419) as the standard. The reference range value is 156.3-10,000 pg/mL.

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

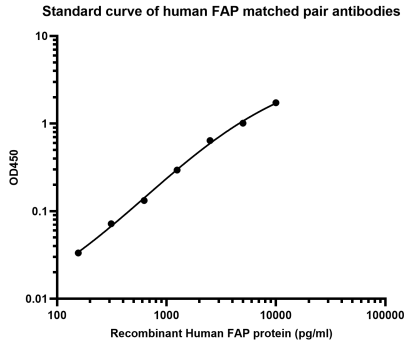

Fig1: Sandwich ELISA analysis of Human FAP matched pair antibodies

Capture: HA725499, Human FAP Rabbit mAb [PSH26-55]
Detector: HA725500, Human FAP Rabbit mAb [PSH26-56]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA725499) diluted in carbonate/bicarbonate buffer, at a concentration of 5 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human FAP protein (HA211419) starting from 10,000 pg/mL to 0 pg/mL and detect antibody (HA725500, Biotin, 0.2 µg/mL) for 1 hour at 30℃ with shaking. Then the plate was washed and incubated with 100 µl per well of SA-HRP for 0.5 hour at 30℃ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

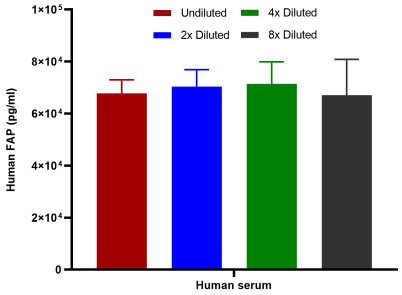

Fig2: Interpolated concentrations of native FAP in human serum.

Capture: HA725499, Human FAP Rabbit mAb [PSH26-55]
Detector: HA725500, Human FAP Rabbit mAb [PSH26-56]

Interpolated concentration of native FAP was measured in duplicate at different sample concentrations and interpolated from the FAP standard curves. The interpolated dilution factor corrected values were plotted (mean +/- SD, n=2). The mean FAP concentration was determined to be 69,308 pg/mL in human serum.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Jia, B. et al. 2016. GPR30 Promotes Prostate Stromal Cell Activation via Suppression of ERα Expression and Its Downstream Signaling Pathway. Endocrinology. 157: 3023-35.
2. Knopf, JD. et al. 2015. The stromal cell-surface protease fibroblast activation protein-α localizes to lipid rafts and is recruited to invadopodia. Biochim. Biophys. Acta. 1853: 2515-25.