Anti-FAP Antibody [JA56-11]

ET1704-23

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, mIHC
Molecular Wt:	Predicted band size: 88 kDa
Clone number:	JA56-11

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 FAP1 aa 1-160 / 760.

Positive control: U-87 MG cell lysates, human pancreatic carcinoma, human colon cancer tissue.

Subcellular location: Cell membrane. Cell surface.

Database links: SwissProt: Q12884 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:1,000
mIHC	1:3,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

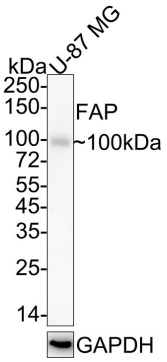

Fig1: Western blot analysis of FAP on U-87 MG cell lysates with Rabbit anti-FAP antibody (ET1704-23) at 1/1,000 dilution.

Lysates/proteins at 20 µg/Lane.
Predicted band size: 88 kDa
Observed band size: 100 kDa
Exposure time: 5 minutes; ECL: K1801;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1704-23) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

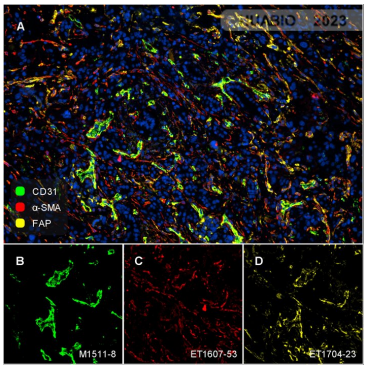

Fig2: Fluorescence multiplex immunohistochemical analysis of the human pancreatic carcinoma (Formalin/PFA-fixed paraffin-embedded sections). Panel A: the merged image of anti-CD31 (M1511-8, green), anti-α-SMA (ET1607-53, red) and anti-FAP (ET1704-23, yellow) on human pancreatic carcinoma. Panel B: anti- CD31 stained on the endothelial cells. Panel C: anti-α-SMA stained on cancer-associated fibroblasts and smooth muscle cells. Panel D: anti-FAP stained on the cancer-associated fibroblasts. HRP Conjugated UltraPolymer Goat Polyclonal Antibody HA1119/HA1120 was used as a secondary antibody. The immunostaining was performed with the Sequential Immuno-staining Kit (IRISKit™MH010101, www.luminiris.cn). The section was incubated in three rounds of staining: in the order of M1511-8 (1/5000 dilution), ET1704-23 (1/1000 dilution), and ET1607-53 (1/3000 dilution) for 20 mins at room temperature. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Nikon ECLIPSE Ni-E microscope.

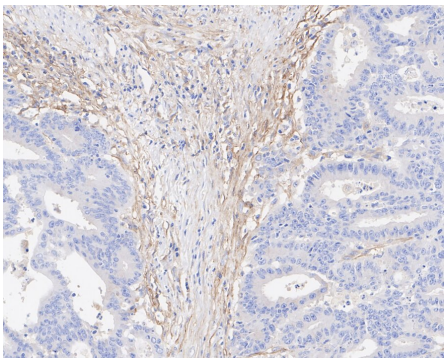

Fig3: Immunohistochemical analysis of paraffin-embedded human colon cancer tissue with Rabbit anti-FAP antibody (ET1704-23) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1704-23) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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.