



## FAP (6D394): sc-71094

### BACKGROUND

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-1 and 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.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: FAP (human) mapping to 2q24.2.

### SOURCE

FAP (6D394) is a mouse monoclonal antibody raised against fibroblast activation protein of human origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

FAP (6D394) is recommended for detection of FAP of human origin by immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells).

Molecular Weight of FAP: 170 kDa.

### SELECT PRODUCT CITATIONS

1. Ding, X., Xi, W., Ji, J., Cai, Q., Jiang, J., Shi, M., Yu, Y., Zhu, Z. and Zhang, J. 2018. HGF derived from cancer-associated fibroblasts promotes vascularization in gastric cancer via PI3K/AKT and ERK1/2 signaling. *Oncol. Rep.* 40: 1185-1195.
2. Zhang, Q., Chai, S., Wang, W., Wan, C., Zhang, F., Li, Y. and Wang, F. 2019. Macrophages activate mesenchymal stem cells to acquire cancer-associated fibroblast-like features resulting in gastric epithelial cell lesions and malignant transformation *in vitro*. *Oncol. Lett.* 17: 747-756.

### 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.