

# Mouse Fibroblast Activation Protein $\alpha$ /FAP Alexa Fluor® 647-conjugated Antibody

Monoclonal Rat IgG<sub>1</sub> Clone # 983802

Catalog Number: FAB9727R

100  $\mu$ g

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Fibroblast Activation Protein $\alpha$ /FAP in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 983802
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Fibroblast Activation Protein $\alpha$ /FAP Leu26-Asp761 Accession # P97321
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 $\mu$ g/10 <sup>6</sup> cells	C2C12 mouse myoblast cell line

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

FAP (also known as seprase) is a 95 kDa Type II transmembrane serine protease that is structurally related to dipeptidyl peptidase IV (DPPIV/CD26) (1, 2). Within the extracellular domain, mouse FAP shares 90% and 97% amino acid (aa) sequence identity with human and rat FAP, respectively (3, 4). Alternative splicing of mouse FAP generates isoforms with a 33 aa or 5 aa deletion in the extracellular juxtamembrane region (3). FAP is expressed on reactive stromal fibroblasts in tumor tissue and wound healing and on synovocytes in rheumatoid arthritis (1, 5-7). It exhibits dipeptidyl peptidase activity with substrate specificity similar to DPPIV, which is specific for N-terminal Xaa-Pro sequences (5, 8). FAP is also an endopeptidase that can degrade Gelatin, Collagens I and IV, Fibronectin, and Laminin (1, 5, 8) as well as several peptide hormones (e.g. Neuropeptide Y, Brain Natriuretic Peptide, Substance P, Peptide YY, and Incretins) (9). The enzymatic activity is dependent on FAP association with DPPIV on the cell surface (5, 8, 10, 11). The matrix-degrading activity of FAP contributes to tumor cell migration and invasion (10-13). In addition, FAP can enhance tumor cell growth by limiting the development of anti-tumor immunity (14).

### References:

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