Mouse Fibroblast Activation Protein α/FAP Alexa Fluor® 405-conjugated Antibody

Monoclonal Rat IgG_1 Clone # 983802

Catalog Number: FAB9727V

100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Fibroblast Activation Protein α/FAP in direct ELISAs.
Source	Monoclonal Rat IgG_1 Clone # 983802
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Fibroblast Activation Protein α/FAP Leu26-Asp761 Accession # P97321
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	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.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	C2C12 mouse myoblast cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

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 synoviocytes 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-dedgrading 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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