

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Fibroblast Activation Protein $\alpha$ /FAP in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Fibroblast Activation Protein $\alpha$ /FAP Leu26-Asp760 Accession # Q12884
<b>Endotoxin Level</b>	<0.10 EU per 1 $\mu$ g of the antibody by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

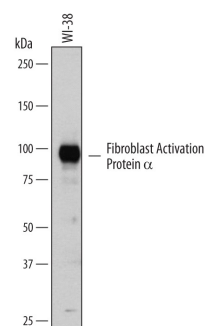
## APPLICATIONS

**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
<b>Western Blot</b>	0.5 $\mu$ g/mL	See Below
<b>Immunohistochemistry</b>	5-15 $\mu$ g/mL	See Below
<b>Immunoprecipitation</b>	25 $\mu$ g/mL	Conditioned cell culture medium spiked with Recombinant Human Fibroblast Activation Protein $\alpha$ /FAP (Catalog # 3715-SE), see our available Western blot detection antibodies

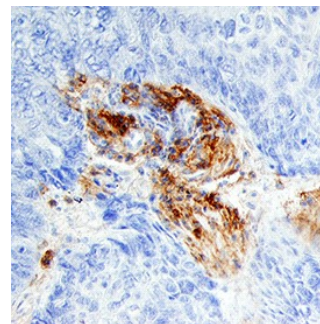
## DATA

### Western Blot



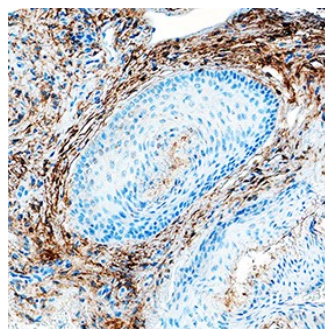
**Detection of Human Fibroblast Activation Protein  $\alpha$ /FAP by Western Blot.** Western blot shows lysates of WI-38 human lung fibroblast cell line. PVDF membrane was probed with 0.5  $\mu$ g/mL of Sheep Anti-Human Fibroblast Activation Protein  $\alpha$ /FAP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3715) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Fibroblast Activation Protein  $\alpha$ /FAP at approximately 97 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunohistochemistry



**Fibroblast Activation Protein  $\alpha$ /FAP in Human Squamous Cell Carcinoma.** Fibroblast Activation Protein  $\alpha$ /FAP was detected in immersion fixed paraffin-embedded sections of human squamous cell carcinoma using Sheep Anti-Human Fibroblast Activation Protein  $\alpha$ /FAP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3715) at 15  $\mu$ g/mL overnight at 4  $^{\circ}$ C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to connective tissue. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

### Immunohistochemistry



**Fibroblast Activation Protein  $\alpha$ /FAP in Human Basal Cell Carcinoma.** Fibroblast Activation Protein  $\alpha$ /FAP was detected in immersion fixed paraffin-embedded sections of human basal cell carcinoma using Sheep Anti-Human Fibroblast Activation Protein  $\alpha$ /FAP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3715) at 10  $\mu$ g/mL overnight at 4  $^{\circ}$ C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 $^{\circ}$ C
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 <math>^{\circ}</math>C as supplied.</li> <li>• 1 month, 2 to 8 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 <math>^{\circ}</math>C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

FAP (also known as seprase) is a Type II transmembrane serine protease that is structurally related to dipeptidyl peptidase IV (1). FAP has substrate specificity similar to dipeptidyl peptidase IV, which is specific for N-terminal Xaa-Pro sequences, but FAP is also an endopeptidase able to degrade gelatin and Type I collagen (2). The enzymatically active form of FAP is a dimer (3). FAP has a restricted tissue distribution. It is not detectable in normal tissues or resting fibroblasts, but is highly expressed on reactive stromal fibroblasts in epithelial cancers (4), in granulation tissue during wound healing, and in bone and soft tissue sarcomas (5). Because of its expression patterns and enzymatic activities, FAP is believed to play roles in tumor invasion, tissue remodeling, and wound repair.

## References:

1. Scanlan, M.J. *et al.* (1994) *Proc. Natl. Acad. Sci. USA* **91**:5657.
2. Park, J.E. *et al.* (1999) *J. Biol. Chem.* **274**:36505.
3. Pineiro-Sanchez, M.L. *et al.* (1997) *J. Biol. Chem.* **272**:7595.
4. Garin-Chesa, P. *et al.* (1990) *Proc. Natl. Acad. Sci. USA* **87**:7235.
5. Rettig, W.J. *et al.* (1988) *Proc. Natl. Acad. Sci. USA* **85**:3110.