



**Mouse (monoclonal)  
Anti-Human Filamin-A  
Unconjugated  
PRODUCT ANALYSIS SHEET**

<b>Catalog Number:</b>	AHO1402
<b>Lot Number:</b>	See product label
<b>Expiration Date:</b>	See product label
<b>Quantity/Volume:</b>	100 µg/0.2 mL
<b>Clone Number:</b>	209#13 (also known as Alper-p280)
<b>Isotype:</b>	IgG1 κ (mouse)
<b>Form of Antibody:</b>	Purified immunoglobulin in phosphate buffered saline, pH 7.2, with 1% bovine serum albumin.
<b>Preservation:</b>	0.1% sodium azide (Caution: sodium azide is a poisonous and hazardous substance. Handle with care and dispose of properly.)
<b>Purification:</b>	Purified from ascites by protein A/G affinity chromatography.
<b>Immunogen:</b>	Concentrated culture medium conditioned by MDA.MB.231 breast carcinoma cells.
<b>Specificity:</b>	Filamins are a group of ubiquitous cytoplasmic phosphoproteins with molecular weights of approximately 280 kDa. Filamins induce polymerization of actin filaments. In humans, three encoded filamin proteins have been identified: Filamin-A, -B, and -C, which share ~70 percent identity over their amino-acid sequences. Filamin-A, which is capable of cross-linking actin filaments into orthogonal structures, ties actin-filament networks to plasma membrane receptors and acts as a scaffold for intracellular signaling cascades. Filamin-A has also been detected in the tumor cell cytoskeleton. Filamin-A is considered as an important element in regulating cell morphology and motility. Recent data have shown that filamin-A could be a tumor marker in the plasma of cancer patients.
<b>Species Reactivity:</b>	Human. Other species not tested.
<b>Applications:</b>	This antibody is suitable for use in Western blotting, immunoprecipitation, ELISA, indirect immunofluorescence and immunohistochemistry.
<b>Suggested Working Dilutions:</b>	For Western blotting, the recommended concentration is 1 µg/mL. The optimal antibody concentration should be determined for each specific application.
<b>Recommended Positive Control:</b>	Culture medium conditioned by MDA.MB.231 cells.
<b>Storage:</b>	Store at 2-8°C. For long term storage, aliquot into small volumes and store at -20°C. Avoid repeated freeze-thaw cycles to prevent denaturing the antibody.

**For Research Use Only. CAUTION: Not for human or animal therapeutic or diagnostic use.**

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PI AHO1402

(Rev 03/10) DCC-10-0518

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## References:

Gorlin, J.B., et al. (1990) Human endothelial actin-binding protein (ABP-280, nonmuscle filamin): a molecular leaf spring. *J. Cell Biol.* 111:1089-1105.

Liu, G., et al. (1997) Cytoskeletal protein ABP-280 directs the intracellular trafficking of furin and modulates proprotein processing in the endocytic pathway. *J. Cell Biol.* 139:1719-1733.

Wang, K., et al. (1975) Filamin, a new high-molecular-weight protein found in smooth muscle and non-muscle cells. *Proc. Nat'l. Acad. Sci. USA* 72:4483-4486.

Petrecca, K., et al. (2000) Localization and enhanced current density of the Kv4.2 potassium channel by interaction with the actin-binding protein filamin. *J. Neurosci.* 20:8736-8744.

Stossel, T.P., et al. (2001) Filamins as integrators of cell mechanics and signalling. *Nat. Rev. Mol. Cell Biol.* 2:138-145.

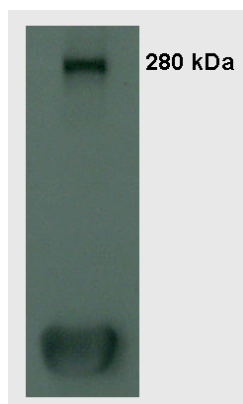
Marti, A., et al. (1997) Actin-binding protein-280 binds the stress-activated protein kinase (SAPK) activator SEK-1 and is required for tumor necrosis factor-alpha activation of SAPK in melanoma cells. *J. Biol. Chem.* 272:2620-2628.

Alper, Ö., et al. (2006) Filamin-A in brain and breast cancers. *New Eng. J. Med.* (submitted).

## Related Product:

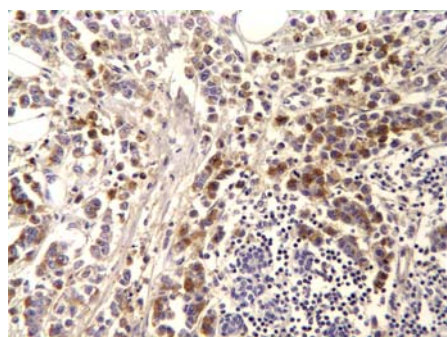
Filamin 2 [pS2113] polyclonal antibody

Cat. # 44-1120G



## Immunoprecipitation and Western Blot Analysis

Proteins (500 µg) from the breast carcinoma cell line, MDA.MB.231 immunoprecipitated (1 µg/mL) at 4°C with this anti-filamin-A monoclonal antibody (clone Alper-p280) and resolved by SDS-PAGE on 8% polyacrylamide gel and transferred to PVDF. The membranes were blocked by 5% milk/PBST buffer and incubated with Alper-p280 at a concentration of 1 µg/mL for one hour at room temperature in a 5% milk/PBST buffer. After washing, the membranes were incubated with a goat F(ab')<sub>2</sub> anti-mouse IgG alkaline phosphatase conjugated antibody (Cat. # AMI4405) at a 1:2000 dilution. Bands were detected with CDP-substrate using the WesternStar™ method (Tropix) and Kodak BioMax film.



## Immunohistochemical Analysis

The figure presented at left shows the immunohistochemical staining of paraffin-embedded sections of invasive human breast cancer using the anti-Filamin-A monoclonal antibody (Alper-p280).

### Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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