

## ABfinity™ SMAD1 Recombinant Rabbit Monoclonal Antibody

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Rev. 1.00

Catalog Number: 701168

Store at 2 to 8°C (short-term), or -20°C (long-term)

**Clonality:** Monoclonal  
**Concentration:** 0.5 mg/mL  
**Quantity:** 100 µg  
**Volume:** 200 µL

**Host/Class:** Rabbit IgG  
**Reactivity:** Human SMAD1  
**Predicted Reactivity:** Human

### Product Description

SMAD1 belongs to the SMAD family of proteins, which are downstream effectors of the TGFβ/BMP signaling pathway. Members of the SMAD family transmit TGF-β signals from the cell surface into the nucleus. Once in the nucleus, SMADs can target a variety of DNA binding proteins to regulate transcriptional responses. SMAD1 is a receptor-regulated SMAD (R-SMADs), which mediates signals of bone morphogenetic proteins (BMPs) in the cell to regulate a wide range of critical processes including morphogenesis, cell-fate determination, proliferation, differentiation, and apoptosis.

### Product Specifications

**Immunogen:** Peptide corresponding to amino acids 178–193 of human SMAD1  
**Alternate Names:** MADR1, MADH1 (Mothers against decapentaplegic homolog 1), BSP1  
**Apparent MW:** ~52 kDa  
**Gene ID:** 4086  
**Protein Accession No.:** Q15797  
**Sequence Identity:** Human  
**Sequence Homology:** Mouse, Rat, Rabbit, Horse  
**Clone/PAD:** 12H1L14  
**Lot:** See product label

### Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	C2C12 cells	1–2 µg/mL
Indirect ELISA	Human	Peptide	1.5 × 10 <sup>-4</sup> to 3 µg/mL

### Storage and Handling

Store the antibody at 2 to 8°C for up to 1 month, or -20°C for long storage. Avoid repeated freezing and thawing.

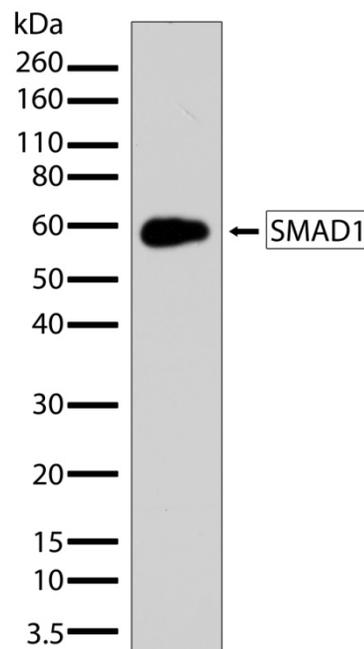
### Stability

Expires one year from date of receipt when stored as instructed.

### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

**Caution:** Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.



**Figure 1** Western blot analysis of ABfinity™ SMAD1 Recombinant Rabbit Monoclonal Antibody (Cat. no. 701168). Western blot analysis was performed on C2C12 whole cell extracts. Endogenous SMAD1 at ~60 kDa was detected using ABfinity™ SMAD1 Recombinant Rabbit Monoclonal Antibody at a concentration of 2 µg/mL. The blot was developed using chemiluminescence (ECL) method.

**For research use only. Not for human or animal therapeutic or diagnostic use.**

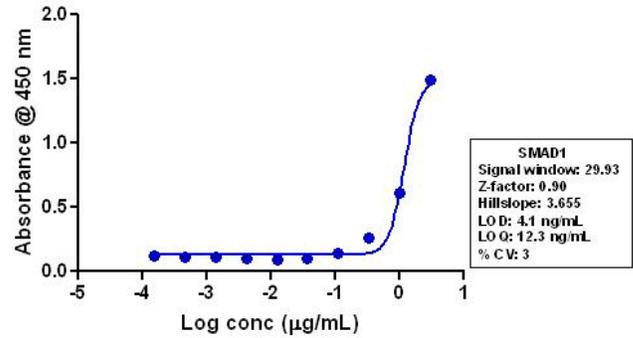
Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

## Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).

## Related Products

Product Name	Quantity	Catalog no.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 µm	20/pack	LC2000



**Figure 2** Indirect ELISA of ABfinity™ SMAD1 Recombinant Rabbit Mono- clonal Antibody (Cat. no. 701168). Indirect ELISA was performed using various dilutions of ABfinity™ SMAD1 Recombinant Rabbit Mono- clonal Antibody (Cat. no. 701168) to detect SMAD1 peptide coated onto the plate. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

### Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> 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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