

Datasheet for ABIN732158
anti-Smad1/5 antibody (AA 361-465)[Go to Product page](#)**1** Validation**1** Image**2** Publications

Overview

Quantity:	100 µL
Target:	Smad1/5 (SMAD1/5)
Binding Specificity:	AA 361-465
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Smad1/5 antibody is un-conjugated
Application:	Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Flow Cytometry (FACS), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), ELISA, Immunocytochemistry (ICC)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human Smad 5
Isotype:	IgG
Cross-Reactivity:	Human
Predicted Reactivity:	Mouse,Rat,Dog,Cow,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	Smad1/5 (SMAD1/5)
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Target Details

Alternative Name:	Smad1 + Smad5 (SMAD1/5 Products)
Background:	<p>Synonyms: Mothers against decapentaplegic homolog 5, SMAD5, Mothers against decapentaplegic homolog 1, SMAD1</p> <p>Background: Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD5 is a receptor-regulated SMAD (R-SMAD). Transcriptional modulator activated by BMP (bone morphogenetic proteins) type 1 receptor kinase. SMAD1 is a receptor-regulated SMAD (R-SMAD). SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. May act synergistically with SMAD4 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression.</p>
Gene ID:	4090, 4086

Application Details

Application Notes:	<p>ELISA 1:500-1000</p> <p>FCM 1:20-100</p> <p>IHC-P 1:200-400</p> <p>IHC-F 1:100-500</p> <p>IF(IHC-P) 1:50-200</p> <p>IF(IHC-F) 1:50-200</p> <p>IF(ICC) 1:50-200</p> <p>ICC 1:100-500</p>
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Handling

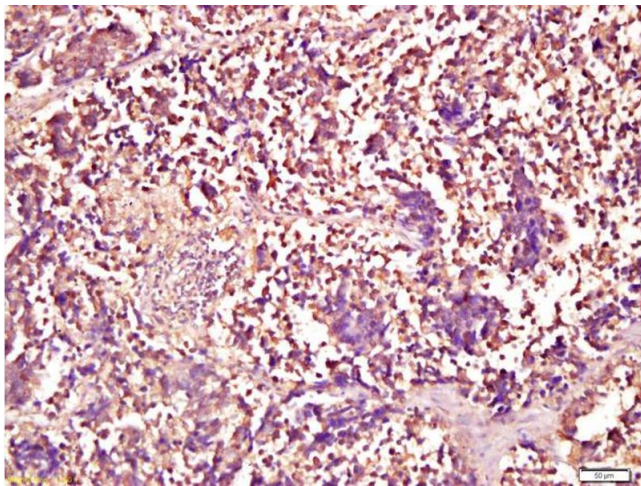
Expiry Date: 12 months

Publications

Product cited in: Qu, Zheng, Gan, Lian, He, Li, Yuan, Yang, Li, Ji, Yan, Xu, Guo: "MiR-199a-3p suppresses proliferation and invasion of prostate cancer cells by targeting Smad1." in: **Oncotarget**, Vol. 8, Issue 32, pp. 52465-52473, (2017) ([PubMed](#)).

Wei, Wang, Zhan, Chen, Fang, Zhang, Zhang: "Smurf1 inhibits integrin activation by controlling Kindlin-2 ubiquitination and degradation." in: **The Journal of cell biology**, Vol. 216, Issue 5, pp. 1455-1471, (2017) ([PubMed](#)).

Validation report #029752 for Western Blotting (WB)



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Anti-Smad1 Polyclonal Antibody, Unconjugated (ABIN732158) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Successfully validated (Western Blotting (WB))

by [Alamo Laboratories Inc](#)

Report Number: 029752

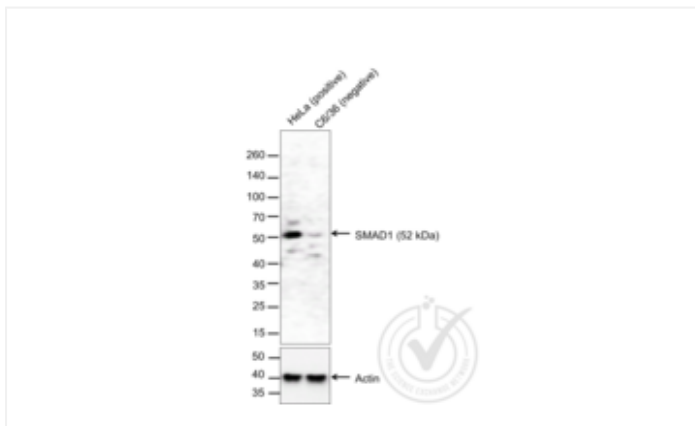
Date: Jul 03 2014

Lot Number:	120918
Method validated:	Western Blotting (WB)
Positive Control:	Hela cells
Negative Control:	c6/36 cells (non-reactive species)
Notes:	<p>A single major band was observed in the positive control at the correct molecular weight.</p> <p>Several additional faint bands appeared in both the positive and negative controls, but they did not indicate significant non-specific interaction.</p>
Primary Antibody:	- Antigen: SMAD, Mothers Against DPP Homolog 1 (SMAD1) (1:200 dilution) - Catalog number: ABIN732158 - Supplier: Bioss - Supplier catalog number: bs-1619R - Lot number: 120918
Secondary Antibody:	- Antibody: Goat Anti-Rabbit IgG (H + L)-HRP Conjugate (1:20,000 dilution) - Supplier: Bio-Rad - Catalog number: #170-6515 - Lot number: L170-6515
Controls:	<ul style="list-style-type: none">• Positive control: HeLa cell extract• Negative control: c6/36 Mosquito cell extract
Protocol:	<ul style="list-style-type: none">• 1. Total protein extracts were boiled in 1X SDS Sample Buffer containing 1% SDS and 1.25% β-mercaptoethanol at 95°C for 5 min prior to loading.• 2. 58 μg of boiled extracts were loaded and resolved on 8-16% SDS-polyacrylamide gel.• 3. The Thermo Scientific - Spectra Multicolor Broad Range (Cat # 26634) were used as molecular mass markers.• 4. Proteins were then transferred onto PVDF membrane by wet transfer and protein transfer was confirmed with Ponceau-S staining.• 5. The PVDF membrane was incubated with 25 mL of blocking buffer [Tris Buffered Saline, pH 7.4 plus 0.1% TW20 (TBST)] containing 5% (W/V) BSA at room temperature for 1 h.• 6. The membrane was rinsed with TBST once.• 7. The membrane was immersed with the protein side up in the primary antibody solution (anti-SMAD1; 1:200) in TBST containing 5% (W/V) BSA and incubated for 16 h at 4°C.• 8. The membrane was rinsed in TBST thrice for 5 min each.• 9. The membrane was incubated in the HRP-conjugated secondary antibody solution (Goat anti-rabbit IgG-HRP; 1:20,000) in TBST containing 5% (W/V) BSA and incubated for 1 h at room temperature (~26°C) with gentle agitation.

- 10. The membrane was rinsed in TBST thrice for 5 min each.
- 11. The membrane was rinsed in TBS twice for 30 s each.
- 12. Signals were detected with ECL-2 Substrate. The blot was scanned for 300 s.
- 13. The membrane was rinsed three times TBST.
- 14. Incubated in Acidic Glycine Stripping Buffer at room temperature with gentle agitation for 3 times, 10 min each.
- 15. The membrane was washed in TBST 2 times for 10 min each.
- 16. Repeated Steps 5-12 with the loading control antibody (anti-Actin; 1:6,000) and its matching secondary antibody (Goat anti-rabbit IgG-HRP; 1:20,000).

Experimental Notes: - No experimental challenges noted.

Image for Validation report #029752



Validation image no. 1 for anti-Smad1/5 Protein (SMAD1/5) (AA 361-465) antibody (ABIN732158)

Figure 1. Western blot of lysates from HeLa cells (Lane 1) and c6/36 cells (Lane 2) probed with anti-SMAD1 (upper panel) or with anti-Actin for loading control (lower panel).