

Datasheet for ABIN746138

## anti-SMAD3 antibody (pSer423, pSer425)

2 Images

8 Publications



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### Overview

|                      |                                                                                                                                                                                                                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quantity:            | 100 µL                                                                                                                                                                                                                                                                                                   |
| Target:              | SMAD3                                                                                                                                                                                                                                                                                                    |
| Binding Specificity: | pSer423, pSer425                                                                                                                                                                                                                                                                                         |
| Reactivity:          | Human, Mouse, Rat, Pig                                                                                                                                                                                                                                                                                   |
| Host:                | Rabbit                                                                                                                                                                                                                                                                                                   |
| Clonality:           | Polyclonal                                                                                                                                                                                                                                                                                               |
| Conjugate:           | This SMAD3 antibody is un-conjugated                                                                                                                                                                                                                                                                     |
| Application:         | Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

### Product Details

|                       |                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Immunogen:            | KLH conjugated synthetic phosphopeptide derived from human Smad3 around the phosphorylation site of Ser423/425 [CS(p-S)V(p-S)] |
| Isotype:              | IgG                                                                                                                            |
| Specificity:          | These phosphorylation sites are homologous across the species listed.                                                          |
| Cross-Reactivity:     | Human, Mouse, Pig, Rat                                                                                                         |
| Predicted Reactivity: | Dog,Cow,Horse,Chicken                                                                                                          |
| Purification:         | Purified by Protein A.                                                                                                         |

## Target Details

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| Target:           | SMAD3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Alternative Name: | Smad3 + ( <a href="#">SMAD3 Products</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Background:       | <p>Synonyms: LDS3, LDS1C, MADH3, JV15-2, HSPC193, HsT17436, Mothers against decapentaplegic homolog 3, MAD homolog 3, Mad3, Mothers against DPP homolog 3, hMAD-3, SMAD family member 3, SMAD 3, Smad3, hSMAD3</p> <p>Background: Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.</p> |
| Gene ID:          | 4088                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| UniProt:          | <a href="#">P84022</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Pathways:         | <a href="#">Cell Division Cycle</a> , <a href="#">Chromatin Binding</a> , <a href="#">Cell-Cell Junction Organization</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a> , <a href="#">Autophagy</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## Application Details

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| Application Notes: | WB 1:300-5000<br>ELISA 1:500-1000<br>FCM 1:20-100<br>IHC-P 1:200-400<br>IHC-F 1:100-500<br>IF(IHC-P) 1:50-200<br>IF(IHC-F) 1:50-200<br>IF(ICC) 1:50-200<br>ICC 1:100-500 |
| Restrictions:      | For Research Use only                                                                                                                                                    |

## Handling

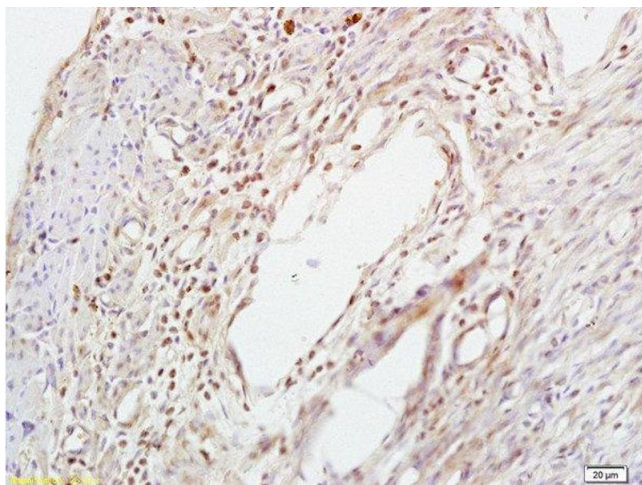
|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Format:            | 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.                                    |
| Expiry Date:       | 12 months                                                                                                          |

## Publications

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|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product cited in: | <p>Shang, Liu, Liu, Li, Dou, Zhang, Sun, Zhang, Zhu, Mu, Ding, Wen: "Telmisartan improves vascular remodeling through ameliorating prooxidant and profibrotic mechanisms in hypertension via the involvement of transforming growth factor-β1." in: <b>Molecular medicine reports</b>, Vol. 16, Issue 4, pp. 4537-4544, (2018) (<a href="#">PubMed</a>).</p> <p>Bai, Chu, Wang, Xiang, Yang: "BAMBI promotes porcine granulosa cell steroidogenesis involving TGF-β signaling." in: <b>Theriogenology</b>, Vol. 100, pp. 24-31, (2017) (<a href="#">PubMed</a>).</p> <p>Zhang, Yang, Li, Xu, Yan, Gao, Jia, Duan: "Angelica polysaccharides inhibit the growth and promote the apoptosis of U251 glioma cells in vitro and in vivo." in: <b>Phytomedicine : international journal of phytotherapy and phytopharmacology</b>, Vol. 33, pp. 21-27, (2017) (<a href="#">PubMed</a>).</p> <p>Shang, Liu, Liu, Zhang, Mu, Zhu, Liang, Zhai, Ding, Li, Wen: "Acetyl-11-Keto-β-Boswellic Acid Attenuates Prooxidant and Profibrotic Mechanisms Involving Transforming Growth Factor-β1, and Improves Vascular Remodeling in Spontaneously Hypertensive Rats." in: <b>Scientific reports</b>, Vol. 6, pp. 39809, (2016) (<a href="#">PubMed</a>).</p> <p>Hu, Duan, Li, Wang, Wang, Chu, Sun, Liu, Wang, Lu, Wen: "Hydroxysafflor Yellow A Ameliorates Renal Fibrosis by Suppressing TGF-β1-Induced Epithelial-to-Mesenchymal Transition." in: <b>PLoS ONE</b>, Vol. 11, Issue 4, pp. e0153409, (2016) (<a href="#">PubMed</a>).</p> |
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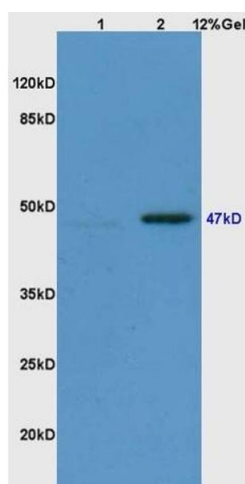
There are more publications referencing this product on: [Product page](#)

## Images



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Formalin-fixed and paraffin embedded mouse uterus labeled with Anti-Smad3 (Ser423 + Ser425) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining



### SDS-PAGE

**Image 2.** Lane 1: mouse embryo lysates Lane 2: mouse brain lysates probed with Anti Phospho-Smad3(Ser423/425) Polyclonal Antibody, Unconjugated (ABIN746138) at 1:200 in 4 °C. Followed by conjugation to secondary antibody at 1:3000 90min in 37 °C. Predicted band 47kD. Observed band size: 47kD.