

Datasheet for ABIN5557524  
**anti-SMAD3 antibody**



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5 Images

### Overview

Quantity:	100 µL
Target:	SMAD3
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This SMAD3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc))

### Product Details

Immunogen:	Recombinant human Smad3 protein, around N-terminal 1-200aa.
Clone:	3D1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

### Target Details

Target:	SMAD3
Alternative Name:	Smad3 ( <a href="#">SMAD3 Products</a> )
Background:	Synonyms: Smad3 phospho Ser423, Smad3 phospho S423, p-Smad3 Ser423, hMAD 3,

## Target Details

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hSMAD3, HSPC193, JV15 2, JV152, MAD mothers against decapentaplegic Drosophila homolog 3, MAD3, MADH 3, MADH3, Mothers against decapentaplegic homolog 3, Mothers against DPP homolog 3, SMA and MAD related protein 3, SMAD 3, SMAD, SMAD-3, SMAD3\_HUMAN.

Background: Smad3 is a 50 kDa member of a family of proteins that act as key mediators of TGF beta superfamily signaling in cell proliferation, differentiation and development. The Smad family is divided into three subclasses: receptor regulated Smads, activin/TGF beta receptor regulated (Smad2 and 3) or BMP receptor regulated (Smad 1, 5, and 8), the common partner, (Smad4) that functions via its interaction to the various Smads, and the inhibitory Smads, (Smad6 and 7). Activated Smad3 oligomerizes with Smad4 upon TGF beta stimulation and translocates as a complex into the nucleus, allowing its binding to DNA and transcription factors. Phosphorylation of the two TGF beta dependent serines 423 and 425 in the C terminus of Smad3 is critical for Smad3 transcriptional activity and TGF beta signaling.

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Gene ID: 4088

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UniProt: [P84022](#)

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Pathways: [Cell Division Cycle](#), [Chromatin Binding](#), [Cell-Cell Junction Organization](#), [Positive Regulation of Endopeptidase Activity](#), [Autophagy](#)

## Application Details

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Application Notes: WB 1:300-5000  
FCM 1:20-100  
IHC-P 1:200-400  
IF(ICC) 1:50-200

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Concentration: 1 µg/µL

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Buffer: Aqueous buffered solution containing 1xTBS (pH 7.4), 1 % BSA, 40 %Glycerol and 0.05 % Sodium Azide.

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Preservative: ProClin

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Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be

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## Handling

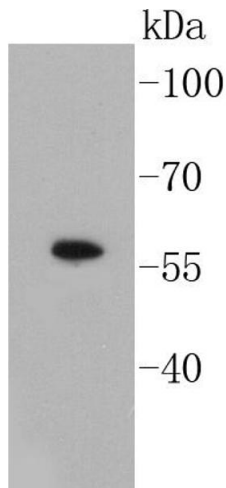
handled by trained staff only.

Storage: 4 °C,-20 °C

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

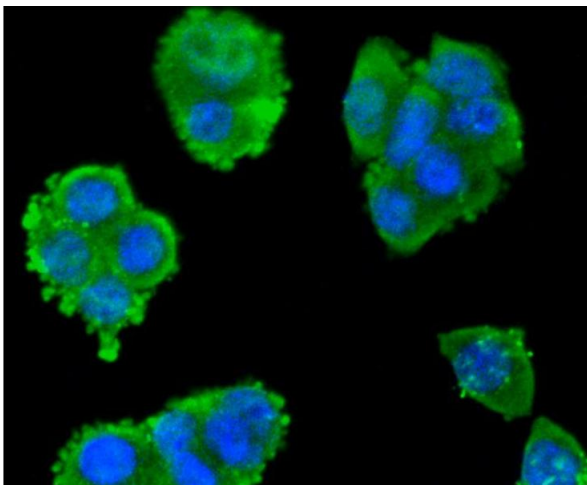
Expiry Date: 12 months

## Images



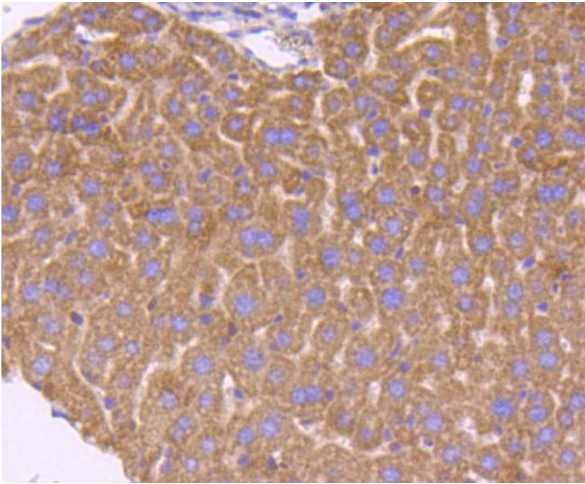
### Western Blotting

**Image 1.** Lane 1: A549 Cell lysates, probed with Smad3 (3D1) Monoclonal Antibody at 1:1000 overnight at 4°C. Followed by a conjugated secondary antibody.



### Immunofluorescence (Cultured Cells)

**Image 2.** SW480 cells were fixed in paraformaldehyde, permeabilized with 0.25% Triton X100/PBS and stained with Smad3 (3D1) Monoclonal Antibody at 1:200 and incubated overnight at 4C, followed by secondary antibody incubation, DAPI staining of the nuclei and detection.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Paraformaldehyde-fixed, paraffin embedded human lung cancer, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer at 37°C for 20min, Antibody incubation with Smad3 (3D1) Monoclonal Antibody at 1:50 overnight at 4°C, followed by a conjugated secondary and DAB staining.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5557524.