

**DATASHEET**
**SMAD3 Rabbit Polyclonal Antibody**
**CAT. NO. APA09532**
**KEY FEATURES**

|               |   |               |                     |
|---------------|---|---------------|---------------------|
| Target        | SMAD3   | Source / Host | Rabbit              |
| Reactivity    | Human, Mouse, Rat, Dog, Monkey, Pig, Sheep  | Clonality     | Polyclonal          |
| Applications  | WB, IHC   | Conjugation   | Unconjugated        |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |               | Storage<br>at -20°C |

**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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

|     |                |
|-----|----------------|
| WB  | 1:500 - 1:1000 |
| IHC | 1:100 - 1:200  |

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

|                   |   |
|-------------------|---|
| Description       | Rabbit polyclonal antibody to SMAD3   |
| Specificity       | Recognizes endogenous levels of SMAD3 protein.  |
| Antibody Type     | Primary antibody  |
| Immunogen         | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SMAD3. The exact sequence is proprietary.                              |
| Purification      | The antibody was purified by immunogen affinity chromatography.   |
| Molecular Weight  | Predicted: 48 kD; Observed: 52 kD   |
| Form/Buffer       | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.   |
| Alternative Names | MADH3; Mothers against decapentaplegic homolog 3; MAD homolog 3; Mad3; Mothers against DPP homolog 3; hMAD-3; JV15-2; SMAD family member 3; SMAD 3; Smad3; hSMAD3 |
| Gene Symbol       | SMAD3   |
| Entrez Gene       | 4088(Human); 17127(Mouse); 25631(Rat)   |
| SwissProt         | P84022(Human); Q8BUN5(Mouse); P84025(Rat)   |

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

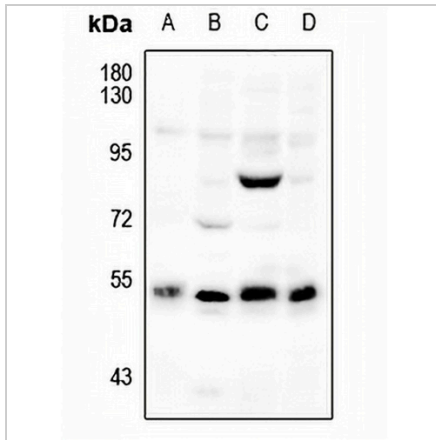
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

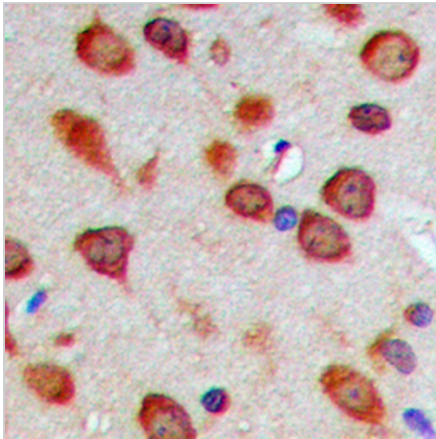
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**DATA**



Western blot analysis of SMAD3 expression in MG63 (A), Myla2059 (B), HCT116 (C), A549 (D) whole cell lysates. (Predicted band size: 48 kD; Observed band size: 52 kD)



Immunohistochemical analysis of SMAD3 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.