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Datasheet for ABIN391546  
**anti-SMAD2 antibody (AA 201-230)**

3 Images

Overview

|                      |  |
|----------------------|--|
| Quantity:            | 400 µL   |
| Target:              | SMAD2  |
| Binding Specificity: | AA 201-230   |
| Reactivity:          | Human, Mouse   |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This SMAD2 antibody is un-conjugated   |
| Application:         | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |

Product Details

|                       |   |
|-----------------------|---|
| Immunogen:            | This SMAD2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 201-230 amino acids from human SMAD2. |
| Clone:                | RB18943   |
| Isotype:              | Ig Fraction   |
| Predicted Reactivity: | B, Zf, Rat  |
| Purification:         | This antibody is purified through a protein A column, followed by peptide affinity purification.  |

Target Details

|                   |  |
|-------------------|--|
| Target:           | SMAD2                                    |
| Alternative Name: | SMAD2 ( <a href="#">SMAD2 Products</a> ) |

## Target Details

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**Background:** The protein belongs to the SMAD, a family of proteins similar to the proteins of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin.

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**Molecular Weight:** 52306

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**Gene ID:** 4087

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**NCBI Accession:** [NP\\_001003652](#), [NP\\_005892](#)

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**UniProt:** [Q15796](#)

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**Pathways:** [Cell Division Cycle](#), [Hormone Transport](#), [Chromatin Binding](#), [Protein targeting to Nucleus](#)

## Application Details

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**Application Notes:** WB: 1:1000. WB: 1:1000-2000. IHC-P-Leica: 1:250

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**Restrictions:** For Research Use only

## Handling

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**Format:** Liquid

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**Buffer:** Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

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**Preservative:** Sodium azide

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**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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**Storage:** 4 °C,-20 °C

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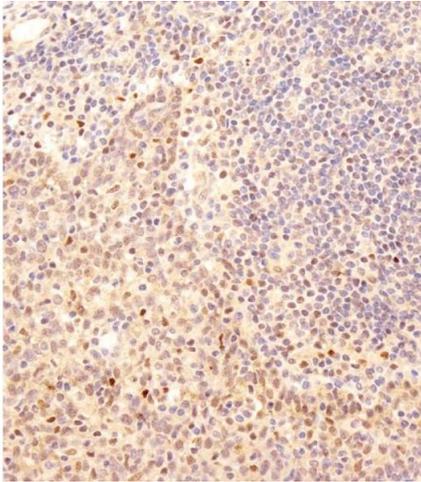
**Storage Comment:** Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small

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aliquots to prevent freeze-thaw cycles.

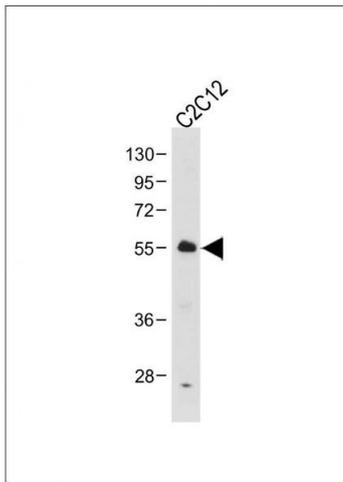
Expiry Date: 6 months

Images



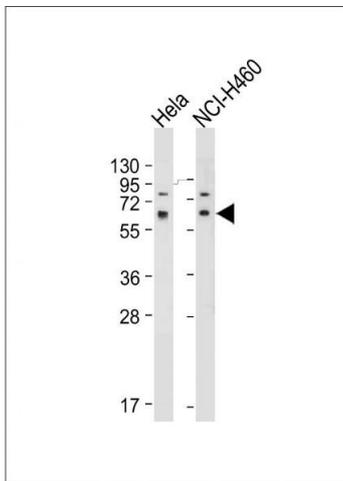
**Immunohistochemistry (Paraffin-embedded Sections)**

**Image 1.** Immunohistochemical analysis of B on paraffin-embedded human tonsil tissue was performed on the Leica®BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH 9.0). Samples were incubated with primary Antibody (1:250) for 15 min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.



**Western Blotting**

**Image 2.** Anti-SD2- Antibody at 1:1000 dilution + C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5 % NFDm/TBST.



**Western Blotting**

**Image 3.** All lanes : Anti-SD2- Antibody at 1:1000-2000 dilution Lane 1: HeLa whole cell lysate Lane 2: NCI- whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5 % NFDm/TBST.