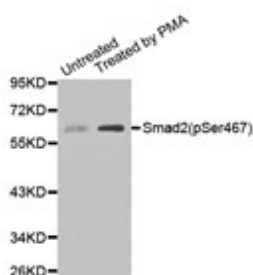


|                          |  |
|--------------------------|--|
| <b>Cat. No:</b>          | ABP-0269   |
| <b>Conjugate:</b>        | Unconjugated   |
| <b>Size:</b>             | 100 ug   |
| <b>Clone:</b>            | Poly   |
| <b>Concentration:</b>    | 1mg/ml   |
| <b>Host:</b>             | Rb   |
| <b>Isotype:</b>          | IgG  |
| <b>Immunogen:</b>        | A phospho specific peptide corresponding to residues surrounding S467 of human SMAD2 |
| <b>Reactivity:</b>       | Hu, Ms, Rt   |
| <b>Applications:</b>     | WB 1:1000  |
| <b>Molecular Weight:</b> | 60 kDa   |
| <b>Purification:</b>     | Affinity purification  |

**Background:**

The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products 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. Alternatively spliced transcript variants have been observed for this gene.

|                 |   |
|-----------------|---|
| <b>Form:</b>    | liquid  |
| <b>Buffer:</b>  | PBS with 0.02% sodium azide, 50% glycerol, pH7.3  |
| <b>Storage:</b> | At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing. |



Western blotting using Anti-Phospho  
SMAD2 S467 antibody on extracts of  
Untreated and Treated 293T cell lines

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