

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Smad1(Phospho-Ser187) polyclonal antibody

Catalog: AP0127 Host: Rabbit Reactivity: Human, Rat, Mouse

#### **BackGround:**

Bone morphogenetic proteins (BMPs) constitute a large family of signaling molecules that regulate a wide range of critical processes including morphogenesis, cell-fate determination, proliferation, differentiation, and apoptosis. BMP receptors are members of the TGF-β superfamily of Ser/Thr kinase receptors. Ligand binding induces multimerization, autophosphorylation, and activation of these receptors. They subsequently phosphorylate SMAD1 at Ser463 and Ser465 in the carboxy-terminal motif SSXS, as well as SMAD5 and SMAD9 (SMAD8) at their corresponding sites. These phosphorylated SMADs dimerize with the coactivating SMAD4 and translocate to the nucleus, where they regulate the transcription of target genes. MAP kinases and CDKs 8 and 9 are also reported to phosphorylate residues in the linker region of SMAD1, including Ser206. Phosphorylation of SMAD1 at Ser206 recruits Smurf1 to the linker region and leads to the degradation of SMAD1. Phosphorylation at this site also promotes SMAD1 transcriptional activity by recruiting YAP to the linker region.

## **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

#### **Molecular Weight:**

~ 60 kDa

#### **Swiss-Prot:**

Q15797

#### **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

# **Applications:**

WB: 1:500~1:1000

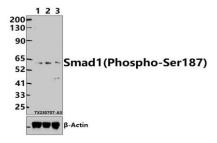
#### Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

Smad1(Phospho-Ser187) polyclonal antibody detects endogenous levels of Smad1 protein only when phosphorylated at Ser187.

#### **DATA:**



Western blot (WB) analysis of Smad1 (Phospho-Ser187) polyclonal antibody at 1:500 dilution

Lane1:Hela whole cell lysate(30ug)

Lane2:Hela treated with PMA(200nM, 10min) whole cell lysate(30ug)

Lane3:The Brain tissue lysate of Rat(30ug)

# Note:

For research use only, not for use in diagnostic procedure.

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