For Research Use Only

## Phospho-SMAD9 (Ser465/467) Recombinant antibody

Catalog Number:80144-2-RR



**Basic Information** 

Catalog Number: GenBank Accession Number:

80144-2-RR BC011559 GeneID (NCBI):

Nanodrop: **UNIPROT ID:** Source: 015198 Rabbit Full Name:

100ul, Concentration: 1000 ug/ml by 4093

Isotype: SMAD family member 9

IgG Calculated MW:

430 aa, 49 kDa Observed MW: 55 kDa

**Purification Method:** 

Protein A purfication CloneNo.:

240470A12

Recommended Dilutions: WB 1:2000-1:10000

**Applications** 

**Tested Applications:** 

WB, ELISA

Species Specificity:

human

Positive Controls:

WB: BMP2 treated HeLa cells,

## **Background Information**

Mothers against decapentaplegic homolog 9 also known as SMAD9, SMAD8, and MADH6, belongs to the SMAD family of proteins, which belong to the  $TGF\beta$  superfamily of modulators. Like many other  $TGF\beta$  family members, SMAD9 is involved in cell signalling. When a bone morphogenetic protein binds to a receptor (BMP type 1 receptor kinase) it causes SMAD9 to interact with SMAD anchor for receptor activation (SARA). The binding of ligands causes the phosphorylation of the SMAD9 protein and the dissociation from SARA and the association with SMAD4. It is subsequently transferred to the nucleus where it forms complexes with other proteins and acts as a transcription factor. SMAD9 is a receptor regulated SMAD (R-SMAD) and is activated by bone morphogenetic protein type 1 receptor kinase. There are two isoforms of the protein. The antibody recognizes both SMAD1 and SMAD5 protein phosphorylated at Ser463/465.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

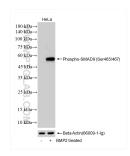
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



Non-treated and BMP2 (HZ-1128) treated HeLa cells were subjected to SDS PAGE followed by western blot with 80144-2-RR (Phospho-SMAD9 (Ser465/467) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as a loading control.