SignalChem
Specialists in Signaling Proteins
1-866-9 KINASE (54-6273)

Catalog #	Aliquot Size
S10-365R-100	100 µg

Anti-Phospho-SMAD1 (Ser206)

Rabbit Polyclonal Antibody

Catalog # S10-365R

Lot # B3216-76

Cited Applications

ELISA, WB

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the human SMAD1 protein phosphorylated at Serine 206

Cross Reactivity

Human, Mouse, Rat and Dog

Host/Isotype/Clone#

Rabbit, IgG

Immunogen

The antibody was produced against synthesized peptide corresponding to the region of amino acids containing Ser206 of the SMAD1 protein

Formulation

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

Stability

1yr at –20°C from date of shipment

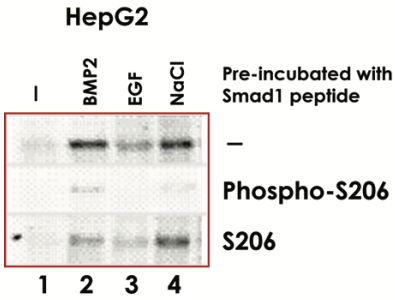
Scientific Background

SMAD1 is a member of the SMAD family which are signal transducers and transcriptional modulators that mediate multiple signaling pathways. The actions of bone morphogenetic proteins (BMPs) are mediated by SMAD1 and SMAD1 can be phosphorylated and activated by the BMP receptor kinase (1). Phosphorylated SMAD1 forms a complex with SMAD4 that is important for its function in the transcription regulation. The SMAD1-SMAD4 complex is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-mediated degradation. The formation of a complex between STAT3 and SMAD1, bridged by p300, is involved in the cooperative signaling of LIF and BMP2 and the subsequent induction of astrocytes from neuronal progenitors (2).

References:

1. Hoodless, P. A. et al: MADR1, a MAD-related protein that functions in BMP2 signaling pathways. Cell 85: 489-500, 1996.
2. Nakashima, K. et al: Synergistic signaling in fetal brain by STAT3-Smad1 complex bridged by p300. Science 284: 479-482, 1999.

Sample Data



Western blot using Affinity Purified Anti-Phospho-SMAD1 (Ser206) antibody (1:500 dilution) shows detection of endogenous phosphorylated SMAD1 in whole cell lysates from human hepatoma (HEPG2, lanes 1-4) derived cell lines treated with PBS, BMP2 (5 ng/mL), EGF (1 ng/mL), or NaCl for 1 h at 37°C before harvest. Each lane contains approximately 15 µg of lysate.

Anti-Phospho-SMAD1 (Ser206)

Rabbit Polyclonal Antibody

Catalog #	S10-365R
Lot #	B3216-76
Purification	Immunoaffinity chromatography
Stability	1yr at –20°C from date of shipment
Storage & Shipping	Store product at –20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com