

Phospho-Smad Antibody Sampler Kit



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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| Product Includes | Product # | Quantity | Mol. Wt | Isotype/Source |
|---|-----------|----------|---------|----------------|
| Phospho-SMAD1/5 (Ser463/465) (41D10) Rabbit mAb | 9516 | 40 µl | 60 kDa | Rabbit |
| SMAD1 (D59D7) XP [®] Rabbit mAb | 6944 | 40 µl | 60 kDa | Rabbit IgG |
| SMAD5 Antibody | 9517 | 40 µl | 60 kDa | Rabbit |
| Phospho-SMAD2 (Ser465/467) (138D4) Rabbit mAb | 3108 | 40 µl | 60 kDa | Rabbit IgG |
| SMAD2 (D43B4) XP [®] Rabbit mAb | 5339 | 40 µl | 60 kDa | Rabbit IgG |
| Phospho-SMAD3 (Ser423/425) (C25A9) Rabbit mAb | 9520 | 40 µl | 52 kDa | Rabbit IgG |
| SMAD3 (C67H9) Rabbit mAb | 9523 | 40 µl | 52 kDa | Rabbit IgG |
| Smad4 Antibody | 9515 | 40 µl | 70 kDa | Rabbit |
| Smad6 Antibody | 9519 | 40 µl | 62 kDa | Rabbit |
| Anti-rabbit IgG, HRP-linked Antibody | 7074 | 100 µl | | Goat |

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Phospho-Smad Antibody Sampler Kit contains reagents to investigate the activation of the TGF- β and BMP signaling pathways. The kit contains enough primary and secondary antibodies to perform four Western blot experiments per primary antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Background

Members of the SMAD family of signal transduction molecules are components of a critical intracellular pathway that transmit TGF- β signals from the cell surface into the nucleus. Three distinct classes of SMADs have been defined: the receptor-regulated SMADs (R-SMADs), which include SMAD1, 2, 3, 5, and 9; the common-mediator SMAD (co-SMAD), SMAD4; and the antagonistic or inhibitory SMADs (I-SMADs), SMAD6 and 7 (1-5). Activated type I receptors associate with specific R-SMADs and phosphorylate them on a conserved carboxy-terminal SSXS motif. The phosphorylated R-SMADs dissociate from the receptor and form a heteromeric complex with SMAD4, initiating translocation of the heteromeric SMAD complex to the nucleus. Once in the nucleus, SMADs recruit a variety of DNA binding proteins that function to regulate transcriptional activity (6-8).

Background References

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- Wrana, J.L. (2000) *Sci STKE* 2000, re1.
- Attisano, L. and Wrana, J.L. (2002) *Science* 296, 1646-7.
- Moustakas, A. et al. (2001) *J Cell Sci* 114, 4359-69.

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