

**Smad 4 (C-term) Rabbit Monoclonal Antibody  
Product Data Sheet**

**Catalog # 1676-1**

Clone ID: EP618Y      Lot #: YD030902  
Quantity: 100 µl  
Type: Rabbit Monoclonal IgG  
Species Cross-reactivity:  Human  Mouse  Rat  
Applications:  WB  IHC  ICC  Flow Cytometry  IP  
Molecular Wt.: 65 kDa  
UniProt ID: Q13485

**Background:** Smad 4 is a member of the Mothers Against Dpp (MAD)-related family of proteins. So far, eight Smads have been identified and can be divided in 3 subgroups based on their structure and functions; pathway-restricted, common mediator and inhibitory Smad. Smad 4 is the common Smad (co-Smad) (1-2). Previously identified as the tumor suppressor DPC4 (deleted in pancreatic carcinoma, locus 4), Smad 4 is functionally distinct among the Smad family, and is required for the assembly and transcriptional activation of diverse, Smad-DNA complexes (3). In contrast to the R-Smads, Smad 4 is not regulated by phosphorylation, but acts as a common mediator of TGF-β, activin, and bone morphogenetic protein signaling responses (4). Smad 4 is frequently inactivated in pancreatic, biliary and colorectal tumors (5-6).

**Specificity:** A synthetic peptide corresponding to residues in the C-term of human Smad 4 was used as immunogen.

**Storage Conditions:** Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

**Recommended Dilutions:**

WB: 1:1,000-5,000  
IHC: 1:100-250  
ICC: 1:100-250  
Flow Cytometry: 1:20  
IP: 1:30

**Background References:**

1. Eppert et al. Cell 86: 543-552, 1996
2. Derynck et al. 1996. Curr. Biol. 6: 1226-1229
3. Hudson et al. (1998) Development 125, 1407-1420
4. Lagna et al. (1996) Nature 383, 832-836
5. Hahn, et al. (1996) Science 271, 350-353
6. Goggins et al. (1998) Cancer Res. 58, 5329-5332

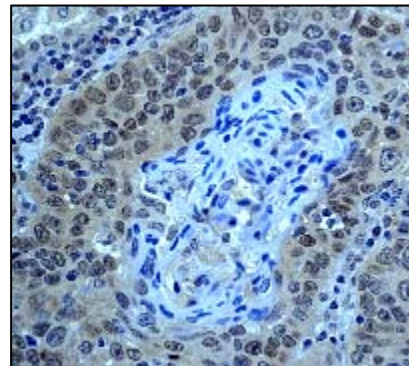
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kDa

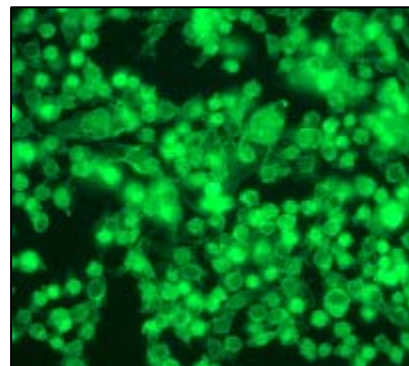
150-  
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**Fig 1.** Western blot analysis on SHSY5Y cell lysate using anti-Smad 4 (C-term) RabMAb (cat. # 1676-1), dilution 1:5,000.



**Fig 2.** Immunohistochemical analysis of paraffin-embedded human lung carcinoma using anti-SMAD4 (C-term) RabMAb (cat. # 1676-1).



**Fig 3.** Immunofluorescent staining of HeLa cells using anti-SMAD4 (C-term) RabMAb (cat. # 1676-1).

**For research use only. Not for use in diagnostic or therapeutic applications.**

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit [www.epitomics.com](http://www.epitomics.com).