

**#4193** Store at -20°C

## Cripto (D81B12) Rabbit mAb


**Cell Signaling**  
TECHNOLOGY®

**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**
**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	20	Rabbit IgG	#P13385	6997

### Product Usage Information

#### Application

Western Blotting

Immunoprecipitation

#### Dilution

1:1000

1:50

### 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.

### Specificity / Sensitivity

Cripto (D81B12) Rabbit mAb detects endogenous levels of total cripto protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to an amino acid sequence at the N-terminus of human cripto.

### Background

Cripto, also known as teratocarcinoma derived growth factor 1 (TDGF-1), belongs to the EGF-CFC family of proteins. Members of this family are characterized by an N-terminal signal peptide, a conserved cysteine rich domain (CFC motif), and a short hydrophobic carboxy-terminal tail that contains GPI cleavage and attachment sites. The GPI moiety anchors Cripto and family members to the extracellular plasma membrane (1). An O-linked fucosylation site within the EGF-like motif is required for Cripto and related family members to perform their function as co-receptors for TGF-β-related ligands such as Nodal and Vg1/GDF1 (2,3). Soluble forms of Cripto can be produced - these contain intact EGF and CFC domains, and are thought to have paracrine activities, as opposed to the autocrine activity of Cripto functioning as a coreceptor (4). Understanding of this paracrine activity is not complete, but it is proposed that Cripto may act as co-ligand for Nodal (3).

Cripto is an important modulator of embryogenesis and oncogenesis (4). It is highly expressed in early embryos, and in embryonic stem (ES) cells where it is involved in cardiomyocytic differentiation and acts as a negative regulator of neurogenesis (5-7). Transient activation of Cripto is essential for the capacity of stem cell self-renewal and pluripotency in ES cells, and in some adult derived stem cells (8). Signaling through Cripto can also stimulate other activities that promote tumorigenesis such as stimulation of proliferation, cell motility, invasion, angiogenesis and epithelial-mesenchymal transition (EMT) (9-11). Cripto is highly expressed in a broad range of tumors, where it acts as a potent oncogene.

### Background References

1. Minchiotti, G. et al. (2000) *Mech Dev* 90, 133-42.
2. Schiffer, S.G. et al. (2001) *J Biol Chem* 276, 37769-78.
3. Yan, Y.T. et al. (2002) *Mol Cell Biol* 22, 4439-49.
4. Strizzi, L. et al. (2005) *Oncogene* 24, 5731-41.
5. Xu, C. et al. (1998) *Dev Biol* 196, 237-47.
6. Parisi, S. et al. (2003) *J Cell Biol* 163, 303-14.
7. Minchiotti, G. (2005) *Oncogene* 24, 5668-75.
8. Beachy, P.A. et al. (2004) *Nature* 432, 324-31.
9. Wechselberger, C. et al. (2001) *Exp Cell Res* 266, 95-105.
10. Bianco, C. et al. (2005) *J Natl Cancer Inst* 97, 132-41.
11. Strizzi, L. et al. (2004) *J Cell Physiol* 201, 266-76.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

## Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](https://cellsignal.com/trademarks) for more information.

## Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.