

Cripto (F-20): sc-17188

BACKGROUND

Teratocarcinoma-derived growth factor (TDGF)-1 gene encodes a protein known as cripto-1 (Cripto). Cripto is first expressed in the forming mesoderm during gastrulation but later in development the expression is restricted to the truncus arteriosus of the developing heart. This suggests that Cripto mediates the progression of epiblastic cells that give rise to the mesoderm. In the adult animal it is expressed at low levels in the spleen, heart, lung and brain. Cripto overexpression is characteristic of human gastric and colorectal carcinomas.

REFERENCES

1. Dono, R., et al. 1993. The murine cripto gene: expression during mesoderm induction and early heart morphogenesis. *Development* 118: 1157-1168.
2. Brandt, R., et al. 1994. Identification and biological characterization of an epidermal growth factor-related protein: cripto-1. *J. Biol. Chem.* 269: 17320-17328.
3. Baldassarre, G., et al. 2001. A truncated form of teratocarcinoma-derived growth factor-1 (cripto-1) mRNA expressed in human colon carcinoma cell lines and tumors. *Tumour Biol.* 22: 286-293.
4. Adamson, E.D., et al. 2002. Cripto: a tumor growth factor and more. *J. Cell. Physiol.* 190: 267-278.
5. Parisi, S., et al. 2003. Nodal-dependent Cripto signaling promotes cardiomyogenesis and redirects the neural fate of embryonic stem cells. *J. Cell Biol.* 163: 303-314.
6. Shen, M.M. 2003. Decrypting the role of Cripto in tumorigenesis. *J. Clin. Invest.* 112: 500-502.
7. Gray, P.C., et al. 2003. Cripto forms a complex with Activin and type II Activin receptors and can block Activin signaling. *Proc. Natl. Acad. Sci. USA* 100: 5193-5198.

CHROMOSOMAL LOCATION

Genetic locus: Tdgf1 (mouse) mapping to 9 F3.

SOURCE

Cripto (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Cripto of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17188 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Cripto (F-20) is recommended for detection of precursor and mature Cripto of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Cripto siRNA (m): sc-39403, Cripto shRNA Plasmid (m): sc-39403-SH and Cripto shRNA (m) Lentiviral Particles: sc-39403-V.

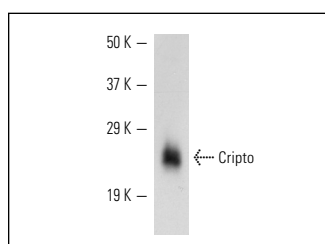
Molecular Weight of Cripto: 24 kDa.

Positive Controls: F9 cell lysate: sc-2245.

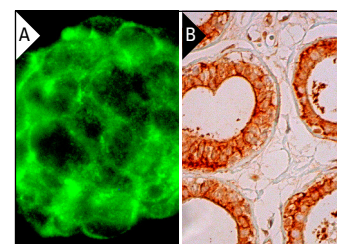
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Cripto (F-20): sc-17188. Western blot analysis of Cripto expression in F9 whole cell lysate.



Cripto (F-20): sc-17188. Immunofluorescence staining of methanol-fixed F9 cells showing cell surface localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing cytoplasmic and membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Wechselberger, C., et al. 2005. Modulation of TGF-β signaling by EGF-CFC proteins. *Exp. Cell Res.* 310: 249-255.
2. Strizzi, L., et al. 2005. Netrin-1 regulates invasion and migration of mouse mammary epithelial cells overexpressing Cripto-1 *in vitro* and *in vivo*. *J. Cell Sci.* 118: 4633-4643.