

Cripto (V-17): sc-23369

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.
6. Shen, M.M. 2003. Decrypting the role of Cripto in tumorigenesis. *J. Clin. Invest.* 112: 500-502.

CHROMOSOMAL LOCATION

Genetic locus: TDGF1 (human) mapping to 3p21.31, TDGF1P3 (human) mapping to Xq23.

SOURCE

Cripto (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Cripto of human 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-23369 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cripto (V-17) is recommended for detection of Cripto and Cripto-3 of human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

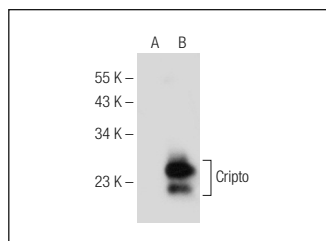
Molecular Weight of Cripto: 24 kDa.

Positive Controls: Cripto (h2): 293T Lysate: sc-370943.

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.

DATA



Cripto (V-17): sc-23369. Western blot analysis of Cripto expression in non-transfected: sc-117752 (A) and human Cripto transfected: sc-370943 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mallikarjuna, K., et al. 2007. Cripto-1 expression in uveal melanoma: an immunohistochemical study. *Exp. Eye Res.* 84: 1060-1066.
2. Cavallari, C., et al. 2013. Role of Lefty in the anti tumor activity of human adult liver stem cells. *Oncogene* 32: 819-826.
3. Nagaoka, T., et al. 2013. Cripto-1 enhances the canonical Wnt/β-catenin signaling pathway by binding to LRP5 and LRP6 co-receptors. *Cell. Signal.* 25: 178-189.

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.



Try **Cripto (H-10): sc-376448**, our highly recommended monoclonal alternative to Cripto (V-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Cripto (H-10): sc-376448**.