

# Cripto (P-14): sc-28449

## 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

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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 (human) mapping to 3p21.31, TDGF1P3 (human) mapping to Xq23; Tdgf1 (mouse) mapping to 9 F3.

## SOURCE

Cripto (P-14) 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-28449 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.

## APPLICATIONS

Cripto (P-14) is recommended for detection of Cripto of mouse, rat, and human origin, 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).

Cripto (P-14) is also recommended for detection of Cripto and Cripto-3 in additional species, including equine, canine, bovine and porcine.

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.

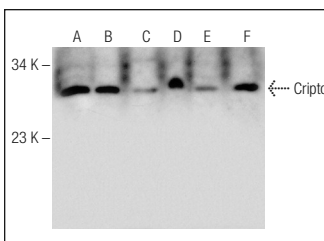
Molecular Weight of Cripto: 24 kDa.

Positive Controls: F9 cell lysate: sc-2245, HEK293 whole cell lysate: sc-45136 or mouse testis extract: sc-2405.

## 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 (P-14): sc-28449. Western blot analysis of Cripto expression in F9 (A), FHs 173We (B), HEK293 (C), P19 (D) and ES-D3 (E) whole cell lysates and mouse testis tissue extract (F).

## RESEARCH USE

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

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Try **Cripto (H-10): sc-376448**, our highly recommended monoclonal alternative to Cripto (P-14). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Cripto (H-10): sc-376448**.