

Cripto (H-10): sc-376448

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.

CHROMOSOMAL LOCATION

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

SOURCE

Cripto (H-10) is a mouse monoclonal antibody raised against amino acids 1-188 representing full length Cripto of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cripto (H-10) is available conjugated to agarose (sc-376448 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376448 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376448 PE), fluorescein (sc-376448 FITC), Alexa Fluor® 488 (sc-376448 AF488), Alexa Fluor® 546 (sc-376448 AF546), Alexa Fluor® 594 (sc-376448 AF594) or Alexa Fluor® 647 (sc-376448 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376448 AF680) or Alexa Fluor® 790 (sc-376448 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Cripto (H-10) is recommended for detection of Cripto of human origin by Western Blotting (starting dilution 1:100, 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 (h): sc-39404, Cripto shRNA Plasmid (h): sc-39404-SH and Cripto shRNA (h) Lentiviral Particles: sc-39404-V.

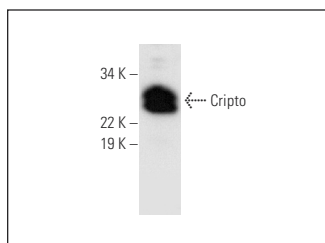
Molecular Weight of Cripto: 24 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181.

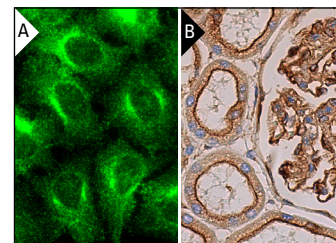
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Cripto (H-10): sc-376448. Western blot analysis of Cripto expression in NTERA-2 cl.D1 whole cell lysate.



Cripto (H-10): sc-376448. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in glomeruli and apical membrane and cytoplasmic staining of cells in tubules (B).

SELECT PRODUCT CITATIONS

1. Silva, L.P., et al. 2018. Cripto-1 is overexpressed in carcinoma ex pleomorphic adenoma of salivary gland. *Eur. Arch. Otorhinolaryngol.* 275: 1595-1600.
2. Liu, Y., et al. 2019. Overexpression levels of Cripto-1 predict poor prognosis in patients with prostate cancer following radical prostatectomy. *Oncol. Lett.* 18: 2584-2591.
3. da Silva, L.P., et al. 2020. Teratocarcinoma-derived growth factor-1 (Cripto-1) is overexpressed in epithelial odontogenic lesions displaying more aggressive behaviour. *Oral Maxillofac. Surg.* 24: 455-460.
4. Silva, A.F., et al. 2020. Oral and uterine leiomyomas exhibit high immunoperoxidase expression of Cripto-1 compared to normal myometrium. *An. Acad. Bras. Cienc.* 92: e20200519.

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.

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