

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody
Cripto-1 TDGF1 Antibody
Catalog # ASR5396

Specification

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 21 kDa in size corresponding to Cripto-1 by western blotting in the appropriate cell lysate or extract. Cripto-1 is reported as a 188 amino acid protein with a molecular weight of 21.1 kDa.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal sequence of human Cripto-1 protein.
Preservative	0.01% (w/v) Sodium Azide

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Additional Information

Gene ID 6997

Other Names
6997

Purity

This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for human Cripto-1 protein. A BLAST analysis was used to suggest limited cross-reactivity with Cripto-1 from mouse based on a 70% homology with the immunizing sequence. Expect cross-reactivity with human Cripto-3 (TDGF2) based on very high levels of sequence conservation. Cross-reactivity with Cripto-1 from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended

storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Protein Information

Name CRIPTO {ECO:0000303|PubMed:2792079, ECO:0000312|HGNC:HGNC:11701}

Function

GPI-anchored cell membrane protein involved in Nodal signaling. Cell-associated CRIPTO acts as a Nodal coreceptor in cis. Shedding of CRIPTO by TMEM8A modulates Nodal signaling by allowing soluble CRIPTO to act as a Nodal coreceptor on other cells (PubMed:27881714). Could play a role in the determination of the epiblastic cells that subsequently give rise to the mesoderm (PubMed:11909953).

Cellular Location

Cell membrane; Lipid-anchor, GPI-anchor. Secreted. Note=Released from the cell membrane by GPI cleavage.

Tissue Location

Preferentially expressed in gastric and colorectal carcinomas than in their normal counterparts. Expressed in breast and lung.

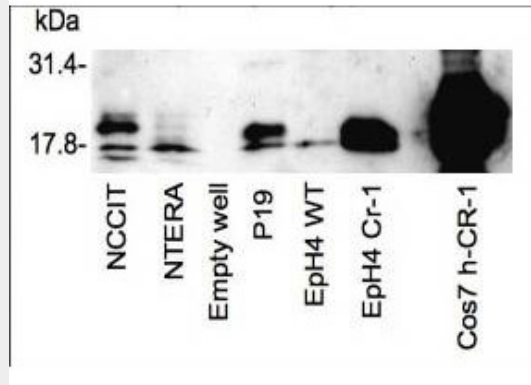
Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Images





Western blot using Rockland's affinity purified anti-Cripto-1 antibody shows detection of endogenous and transfected Cripto-1 from mouse and human sources. The Cripto-1 band appears above the 17.8 kDa marker. Endogenous detection is shown using mouse P19 embryonal carcinoma cells and human NCCIT testicular embryonal carcinoma cells. Eph4 CR-1 is a mouse mammary epithelial cell line stably expressing mouse Cripto-1. NTERA cells are human embryonal carcinoma cells that, when overgrown, differentiate and lose Cripto-1 expression. COS7 cells transfected with human Cripto-1 expression vector were used as a positive control and Eph4 WT cells were used as a negative control. A non-specific band at 45kDa may be present in some preparations. The primary antibody was used at a 1:500 dilution. Personal communication, C. Bianco, NCI, Bethesda, MD

Anti-Cripto-1 (TDGF1) (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Human Cripto-1 (CR-1), also known as Teratocarcinoma-derived growth factor 1 (TDGF1), is a member of the epidermal growth factor (EGF)-GFC family and has been implicated in both embryogenesis and carcinogenesis. During early vertebrate development, CR-1 functions as a co-receptor for Nodal, a transforming growth factor b (TGfb) family member, and is essential for mesoderm and endoderm formation and anterior-posterior and left-right axis establishment. In adult tissues, CR-1 is expressed at a low level in all stages of mammary gland development, and expression increases during pregnancy and lactation. Over-expression of CR-1 in mouse mammary epithelial cells leads to their transformation in vitro, and when injected in mammary glands, CR-1 produces ductal hyperplasias.