

Certificate of Analysis
Product: Affinity Purified Anti-Cripto-1 (TDGF1) [Rabbit] TRIAL SIZE

Code: 600-401-997S

Lot # 20701

Size: 25 μ l

Physical State: Liquid (sterile filtered)

Antibody Concentration: 0.80 mg/ml (by UV absorbance at 280 nm)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Storage Conditions for Trial Size: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 μ l). To minimize loss of volume dilute 1:10 by adding 225 μ l of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20° C or below after dilution. Avoid cycles of freezing and thawing. Expiration date is three (3) months from date of opening.

Background Information: Human Cripto-1 (CR-1), also known as **T**eratocarcinoma-**d**erived **g**rowth **f**actor **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 β (TGF β) 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.

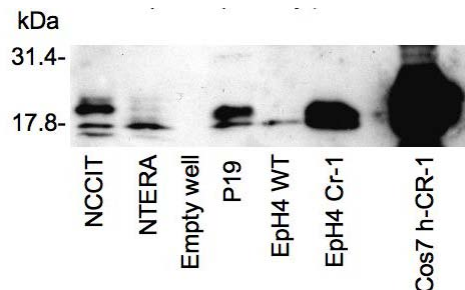


Figure. Western blot using Rockland's affinity purified anti-Cripto-1 antibody shows detection of endogenous and transfected Cripto-1 from mouse and human sources. The Cripto-1 band appears above the 17.8 kDa marker. Endogenous detection is shown using mouse P19 embryonal carcinoma cells and human NCCIT 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*

Application Note(s): 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.

Recommended Dilutions:	ELISA	1:50,000 - 1:150,000
	WESTERN BLOT	1:500 - 1:2,000
	IMMUNOHISTOCHEMISTRY	User Optimized
	OTHER APPLICATIONS	User Optimized

Purity and Specificity: 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.

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.

Relevant Links: NCBI [NP_003203](#) Swiss-Prot [P13385](#)

Related Products:

#[611-703-127](#) Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
 #[611-132-122](#) IRDye® 800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
 #[611-144-122](#) DyLight™680 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
 #[B501-0500](#) BLOTTO (500 g)
 #[BSA-30](#) 30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer) (500 ml)
 #[B304](#) NORMAL GOAT SERUM (NGS) (10 ml)
 #[KIA-003](#) **MaxTag™** Anti-RABBIT IgG Kit for Immunoblotting
 #[MB-070](#) Blocking Buffer for Fluorescent Western Blotting

General References:

Bianco C, Strizzi L, Normanno N, Khan N, Salomon DS (2005) Cripto-1: an oncofetal gene with many faces. *Curr. Top. Dev. Biol.* **67**:85-133.

Bianco C, Strizzi L, Ebert A, Chang C, Rehman A, Normanno N, Guedez L, Salloum R, Ginsburg E, Sun Y, Khan N, Hirota M, Wallace-Jones B, Wechselberger C, Vonderhaar BK, Tosato G, Stetler-Stevenson WG, Sanicola M, Salomon DS (2005) Role of human cripto-1 in tumor angiogenesis. *J. Natl Cancer Inst.* **97**(2):132-141.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 326, Gilbertsville, Pennsylvania, USA.