

# CT120 (T-13): sc-167559

## BACKGROUND

CT120, also known as FAM57A (family with sequence similarity 57, member A), is a 257 amino acid multi-pass membrane protein that contains one TLC (TRAM/LAG1/CLN8) domain. Expressed at high levels in pancreas, CT120 is found at moderate levels in kidney, placenta and heart, and is found at low levels in skeletal muscle, liver and brain. CT120 exists as two alternatively spliced isoforms and interacts with both CD98 and GGTL3. The gene encoding CT120 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of the ovary, colon, prostate gland and fallopian tubes.

## REFERENCES

- Hall, J.M., et al. 1992. Closing in on a breast cancer gene on chromosome 17q. *Am. J. Hum. Genet.* 50: 1235-1242.
- Evans, S.C., et al. 1997. The Li-Fraumeni syndrome: an inherited susceptibility to cancer. *Mol. Med. Today* 3: 390-395.
- Kersemaekers, A.M., et al. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. *Br. J. Cancer* 77: 192-200.
- Soussi, T., et al. 2000. p53 website and analysis of p53 gene mutations in human cancer: forging a link between epidemiology and carcinogenesis. *Hum. Mutat.* 15: 105-113.
- Piura, B., et al. 2001. Three primary malignancies related to BRCA mutation successively occurring in a BRCA1 185delAG mutation carrier. *Eur. J. Obstet. Gynecol. Reprod. Biol.* 97: 241-244.
- He, X., et al. 2002. Molecular cloning and characterization of CT120, a novel membrane-associated gene involved in amino acid transport and glutathione metabolism. *Biochem. Biophys. Res. Commun.* 297: 528-536.
- Pan, D.N., et al. 2005. Inhibitory effect of CT120B, an alternative splice variant of CT120A, on lung cancer cell growth. *Acta Biochim. Biophys. Sin.* 37: 588-592.
- Li, Z., et al. 2010. Silencing of CT120 by antisense oligonucleotides could inhibit the lung cancer cells growth. *Ir. J. Med. Sci.* 179: 217-223.

## CHROMOSOMAL LOCATION

Genetic locus: FAM57A (human) mapping to 17p13.3.

## SOURCE

CT120 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CT120 of human origin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## 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-167559 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CT120 (T-13) is recommended for detection of CT120 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for CT120 siRNA (h): sc-94241, CT120 shRNA Plasmid (h): sc-94241-SH and CT120 shRNA (h) Lentiviral Particles: sc-94241-V.

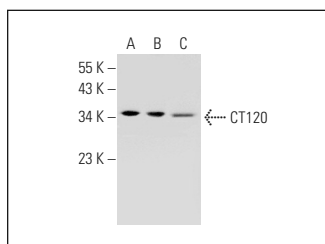
Molecular Weight of CT120 isoforms: 29/26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or human testis extract: sc-363781.

## 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) 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



CT120 (T-13): sc-167559. Western blot analysis of CT120 expression in Jurkat (A) and K-562 (B) whole cell lysates and human testis tissue extract (C).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.