CRLF3 (h2): 293T Lysate: sc-370881



The Power to Question

BACKGROUND

CRLF3 (cytokine receptor-like factor 3), also known as type I cytokine receptor like factor, FRWS, CREME9 (cytokine receptor-like molecule 9), CYTOR4 (cytokine receptor-related protein 4) or P48 (type I cytokine receptor-like factor p48), is a 442 amino acid protein that contains one Fibronectin type-III domain. CRLF3 is expressed in lesion actinic keratosis (AK) and skin and squamous cell carcinoma (SCC), and is thought to negatively regulate the G_0/G_1 phase of the cell cycle. The gene encoding CRLF3 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 and 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

- 1. Hall, J.M., et al. 1992. Closing in on a breast cancer gene on chromosome 17q. Am. J. Hum. Genet. 50: 1235-1242.
- 2. Evans, S.C. and Lozano, G. 1997. The Li-Fraumeni syndrome: an inherited susceptibility to cancer. Mol. Med. Today 3: 390-395.
- 3. Varley, J.M., et al. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. Oncogene 14: 865-871.
- 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.
- 7. Minamoto, T., et al. 2001. Distinct pattern of p53 phosphorylation in human tumors. Oncogene 20: 3341-3347.
- 8. Dang, C., et al. 2006. Identification of dysregulated genes in cutaneous squamous cell carcinoma. Oncol. Rep. 16: 513-519.
- 9. Yang, F., et al. 2009. Cloning and characterization of a novel intracellular protein p48.2 that negatively regulates cell cycle progression. Int. J. Biochem. Cell Biol. 41: 2240-2250.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: GCSAML (human) mapping to 1q44.

PRODUCT

GCSAML (h): 293T Lysate represents a lysate of human GCSAML transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

FDX1L (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FDX1L antibodies. Recommended use: 10-20 µl per lane.

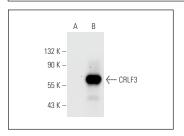
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FDX1L (C-12): sc-515121 is recommended as a positive control antibody for Western Blot analysis of enhanced human FDX1L expression in FDX1L transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CRLF3 (D-10): sc-398388. Western blot analysis of CRLF3 expression in non-transfected: sc-117752 (A) and human CRLF3 transfected: sc-370881 (B) 293T whole cell lysates.

RESEARCH USE

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