

XXYLT1 (G-7): sc-393607

BACKGROUND

C3orf21 (chromosome 3 open reading frame 21), also known as FLJ35155, is a 393 amino acid single-pass membrane protein that exists as three alternatively spliced isoforms. C3orf21 is encoded by a gene that maps to human chromosome 3q29. Chromosome 3 is made up of approximately 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

- Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
- Yue, Y., et al. 2005. Genomic structure and paralogous regions of the inversion breakpoint occurring between human chromosome 3p12.3 and orangutan chromosome 2. *Cytogenet. Genome Res.* 108: 98-105.
- Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". *Genomics* 86: 1-12.
- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.

CHROMOSOMAL LOCATION

Genetic locus: XXYLT1 (human) mapping to 3q29; Xxylt1 (mouse) mapping to 16 B2.

SOURCE

XXYLT1 (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 263-278 within an internal region of XXYLT1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-393607 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

XXYLT1 (G-7) is recommended for detection of XXYLT1 of human origin, AI480653 of mouse origin and the corresponding rat homolog 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 XXYLT1 siRNA (h): sc-77889, AI480653 siRNA (m): sc-140941, XXYLT1 shRNA Plasmid (h): sc-77889-SH, AI480653 shRNA Plasmid (m): sc-140941-SH, XXYLT1 shRNA (h) Lentiviral Particles: sc-77889-V and AI480653 shRNA (m) Lentiviral Particles: sc-140941-V.

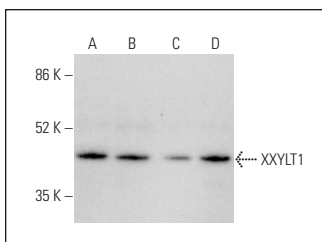
Molecular Weight of XXYLT1 isoform 1/2: 44/22 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, IMR-32 cell lysate: sc-2409 or ARPE-19 whole cell lysate: sc-364357.

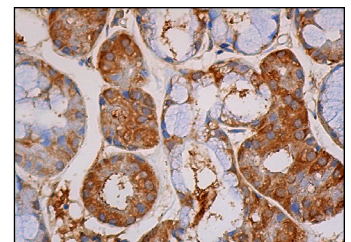
RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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 Immunohisto-mount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



XXYLT1 (G-7): sc-393607. Western blot analysis of XXYLT1 expression in HUVEC-C (A), IMR-32 (B), ARPE-19 (C) and NIH/3T3 (D) whole cell lysates.



XXYLT1 (G-7): sc-393607. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells.

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.