

HHLA3 (Q-15): sc-243017

BACKGROUND

Human endogenous retroviruses (HERVs) are repetitive elements that are derived from ancient germline retroviral infections. Due to their ability to move and insert next to certain genes and alter expression patterns, HERVs have been linked to several chronic diseases such as nervous systemic diseases, cancer, autoimmune and connective tissue diseases. The HERV-H family is the most abundant HERV family and has been implicated in the expression of a variety of adjacent genes. Proteins belonging to the HERV-H family are divided into one major and two minor groups based on sequence divergence. As a member of the HERV-H family, HHLA3 (HERV-H LTR-associating protein 3) is a 153 amino acid protein that is primarily expressed in liver and kidney. There are three isoforms of HHLA3 that are produced as a result of alternative splicing events.

REFERENCES

1. Feuchter-Murthy, A.E., et al. 1993. Splicing of a human endogenous retrovirus to a novel phospholipase A2 related gene. *Nucleic Acids Res.* 21: 135-143.
2. Urnovitz, H.B., et al. 1996. Human endogenous retroviruses: nature, occurrence, and clinical implications in human disease. *Clin. Microbiol. Rev.* 9: 72-99.
3. Kowalski, P.E., et al. 1999. Intergenic splicing between a HERV-H endogenous retrovirus and two adjacent human genes. *Genomics* 57: 371-379.
4. Mager, D.L., et al. 1999. Endogenous retroviruses provide the primary polyadenylation signal for two new human genes (HHLA2 and HHLA3). *Genomics* 59: 255-263.
5. Online Mendelian Inheritance in Man, OMIM[™]. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 604371. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Jern, P., et al. 2002. Full-length HERV-H elements with env SU open reading frames in the human genome. *AIDS Res. Hum. Retroviruses.* 18: 671-676.
7. Yi, J.M., et al. 2004. Evolutionary implication of human endogenous retrovirus HERV-H family. *J. Hum. Genet.* 49: 215-219.
8. Yi, J.M., et al. 2006. Human endogenous retrovirus HERV-H family in human tissues and cancer cells: expression, identification, and phylogeny. *Cancer Lett.* 231: 228-239.
9. Balada, E., et al. 2009. Molecular mechanisms mediated by human endogenous retroviruses (HERVs) in autoimmunity. *Rev. Med. Virol.* 19: 273-286.

CHROMOSOMAL LOCATION

Genetic locus: HHLA3 (human) mapping to 1p31.1.

SOURCE

HHLA3 (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HHLA3 of human origin.

RESEARCH USE

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

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-243017 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HHLA3 (Q-15) is recommended for detection of HHLA3 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); non cross-reactive with HHLA2.

Suitable for use as control antibody for HHLA3 siRNA (h): sc-88191, HHLA3 shRNA Plasmid (h): sc-88191-SH and HHLA3 shRNA (h) Lentiviral Particles: sc-88191-V.

Molecular Weight of HHLA3 isoform 1: 17 kDa.

Molecular Weight of HHLA3 isoform 2: 14 kDa.

Molecular Weight of HHLA3 isoform 3: 9 kDa.

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.

STORAGE

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

PROTOCOLS

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