SANTA CRUZ BIOTECHNOLOGY, INC.

GIMAP2 (A-12): sc-138302



The Power to Question

BACKGROUND

The GTPase of the immunity-associated protein (GIMAP) family of proteins include seven members that are expressed by genes residing on human chromosome 7. GIMAP proteins have been implicated in the regulation of lymphomyeloid cell survival. GIMAP2 (GTPase IMAP family member 2), also known as IMAP2 (immunity-associated protein 2) or HIMAP2, is a 337 amino acid multi-pass membrane protein that is encoded by a gene located on human chromosome 7. Chromosome 7 houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance.

REFERENCES

- 1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
- Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
- Stamm, O., et al. 2002. Human ortholog to mouse gene imap38 encoding an ER-localizable G-protein belongs to a gene family clustered on chromosome 7q32-36. Gene 282: 159-167.
- 4. Krücken, J., et al. 2004. Comparative analysis of the human gimap gene cluster encoding a novel GTPase family. Gene 341: 291-304.
- 5. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. Rev. Prat. 56: 2102-2106.
- Schwefel, D., et al. 2010. Purification, crystallization and preliminary X-ray analysis of human GIMAP2. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 66: 725-729.
- Davila, S., et al. 2010. New genetic associations detected in a host response study to hepatitis B vaccine. Genes Immun. 11: 232-238.
- 8. Online Mendelian Inheritance in Man, OMIM[™]. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 608085. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: GIMAP2 (human) mapping to 7q36.1.

SOURCE

GIMAP2 (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GIMAP2 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138302 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GIMAP2 (A-12) is recommended for detection of GIMAP2 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 other GIMAP family members.

Suitable for use as control antibody for GIMAP2 siRNA (h): sc-89424, GIMAP2 shRNA Plasmid (h): sc-89424-SH and GIMAP2 shRNA (h) Lentiviral Particles: sc-89424-V.

Molecular Weight of GIMAP2: 38 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) Immunofluo-rescence: 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.

RESEARCH USE

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

PROTOCOLS

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