SANTA CRUZ BIOTECHNOLOGY, INC.

ITPRIPL1 (K-23): sc-101996

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ITPRIPL1 (inositol 1,4,5-triphosphate receptor-interacting protein-like 1), also known as KIAA1754L, is a 555 amino acid protein belonging to the ITPRIP family. ITPRIPL1 is a single-pass type I membrane protein expressed as two isoforms produced by alternative splicing events. The gene that encodes ITPRIPL1 maps to human chromosome 2, the second largest human chromosome, consisting of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin icthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. It has been hypothesized that human chromosome 2 is the result of an ancient fusion of two ancestral chromosome due to its composition of a vestigial second centromere and vestigial telomeres.

REFERENCES

1. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. Proc. Natl. Acad. Sci. U.S.A. 88: 9051-9055.
2. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. Hum. Genet. 89: 247-249.
3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. Nature 434: 724-731.
4. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. J. Invest. Dermatol. 126: 2408-2413.
5. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. Dermatology 215: 155-159.
6. Marshall, J.D., et al. 2007. Alström syndrome. Eur. J. Hum. Genet. 15: 1193-1202.
7. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. Hum. Mutat. 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: ITPRIPL1 (human) mapping to 2q11.2.

SOURCE

ITPRIPL1 (K-23) is a purified rabbit polyclonal antibody raised against ITPRIPL1 of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

ITPRIPL1 (K-23) is recommended for detection of ITPRIPL1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ITPRIPL1 siRNA (h): sc-94465, ITPRIPL1 shRNA Plasmid (h): sc-94465-SH and ITPRIPL1 shRNA (h) Lentiviral Particles: sc-94465-V.

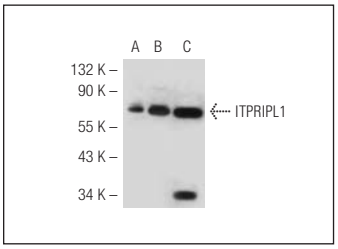
Molecular Weight of ITPRIPL1: 63 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or ITPRIPL1(h): 293T Lysate: sc-117424.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ITPRIPL1 (K-23): sc-101996. Western blot analysis of ITPRIPL1 expression in non-transfected 293T: sc-117752 (**A**), human ITPRIPL1 transfected 293T: sc-117424 (**B**) and Hep G2 (**C**) whole cell lysates.

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.