SANTA CRUZ BIOTECHNOLOGY, INC.

HBS1L (V-23): sc-133648

BACKGROUND

HBS1L (HBS1-like), also known as EF-1 α or ERFS, is a 684 amino acid protein that belongs to the GTP-binding elongation factor family and exists as multiple alternatively spliced isoforms. Expressed in kidney, brain, heart, placenta, liver, muscle and pancreas, HSB1L is thought to play a role in controlling fetal hemoglobin levels, specifically influencing platelet, monocyte and erythrocyte hemoglobin content. The gene encoding HBS1L maps to a locus on human chromosome 6 that is associated with sickle cell anemia and β-thalassemia, suggesting a role for HBS1L in the pathogenesis of blood disorders.

REFERENCES

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3. Menzel, S., et al. 2007. The HBS1L-MYB intergenic region on chromosome 6q23.3 influences erythrocyte, platelet, and monocyte counts in humans. Blood 110: 3624-3626.
4. Thein, S.L., et al. 2007. Intergenic variants of HBS1L-MYB are responsible for a major quantitative trait locus on chromosome 6q23 influencing fetal hemoglobin levels in adults. Proc. Natl. Acad. Sci. USA 104: 11346-11351.
5. Pandit, R.A., et al. 2008. Association of SNP in exon 1 of HBS1L with hemoglobin F level in β0-thalassemia/ hemoglobin E. Int. J. Hematol. 88: 357-361.
6. Lettre, G., et al. 2008. DNA polymorphisms at the Bcl11A, HBS1L-MYB, and β-globin loci associate with fetal hemoglobin levels and pain crises in sickle cell disease. Proc. Natl. Acad. Sci. USA 105: 11869-11874.
7. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612450. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
8. Creary, L.E., et al. 2009. Genetic variation on chromosome 6 influences F cell levels in healthy individuals of African descent and HbF levels in sickle cell patients. PLoS ONE. 4: e4218.

CHROMOSOMAL LOCATION

Genetic locus: HBS1L (human) mapping to 6q23.3; Hbs1l (mouse) mapping to 10 A3.

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.

SOURCE

HBS1L (V-23) is an affinity purified rabbit polyclonal antibody raised against synthetic HBS1L peptide 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.

APPLICATIONS

HBS1L (V-23) is recommended for detection of HBS1L of mouse and 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 HBS1L siRNA (h): sc-95195, HBS1L siRNA (m): sc-145902, HBS1L shRNA Plasmid (h): sc-95195-SH, HBS1L shRNA Plasmid (m): sc-145902-SH, HBS1L shRNA (h) Lentiviral Particles: sc-95195-V and HBS1L shRNA (m) Lentiviral Particles: sc-145902-V.

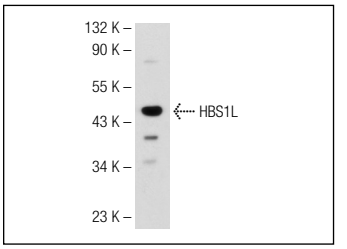
Molecular Weight of HBS1L: 75 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or Jurkat whole cell lysate: sc-2204.

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



HBS1L (V-23): sc-133648. Western blot analysis of HBS1L expression in Jurkat whole cell lysate.

RESEARCH USE

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