SANTA CRUZ BIOTECHNOLOGY, INC.

KLRG2 (A-13): sc-138385

BACKGROUND

KLRG2 (killer cell lectin-like receptor subfamily G member 2), also known as CLEC15B (C-type lectin domain family 15 member B), is a 409 amino acid single-pass membrane protein that contains one C-type lectin domain. Existing as two alternatively spliced isforms, the gene encoding KLRG2 maps to human chromosome 7q34, which 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. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

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.
2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
3. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. Arch. Otolaryngol. Head Neck Surg. 127: 705-708.
4. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. Methods Mol. Med. 126: 113-128.
5. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
6. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. Rev. Prat. 56: 2102-2106.
7. Leone, G., et al. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. Haematologica 92: 1389-1398.

CHROMOSOMAL LOCATION

Genetic locus: KLRG2 (human) mapping to 7q34.

SOURCE

KLRG2 (A-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of KLRG2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138385 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

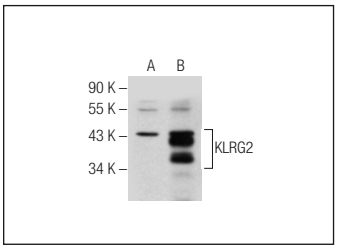
KLRG2 (A-13) is recommended for detection of KLRG2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with KLRG1.

Suitable for use as control antibody for KLRG2 siRNA (h): sc-89814, KLRG2 shRNA Plasmid (h): sc-89814-SH and KLRG2 shRNA (h) Lentiviral Particles: sc-89814-V.

Molecular Weight of KLRG2 isoform 1/2: 43/32 kDa.

Positive Controls: KLRG2 (h): 293T Lysate: sc-112008.

DATA



KLRG2 (A-13): sc-138385. Western blot analysis of KLRG2 expression in non-transfected: sc-117752 (**A**) and human KLRG2 transfected: sc-112008 (**B**) 293T whole cell lysates.

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.

PROTOCOLS

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