

# KLRG2 (B-12): sc-514346

## 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 2 alternatively spliced isoforms, the gene encoding KLRG2 maps to human chromosome 7, 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 composure 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  $\alpha$  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.

## CHROMOSOMAL LOCATION

Genetic locus: KLRG2 (human) mapping to 7q34; Klr2 (mouse) mapping to 6 B1.

## SOURCE

KLRG2 (B-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 154-172 within an internal region of KLRG2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

KLRG2 (B-12) is available conjugated to agarose (sc-514346 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514346 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514346 PE), fluorescein (sc-514346 FITC), Alexa Fluor<sup>®</sup> 488 (sc-514346 AF488), Alexa Fluor<sup>®</sup> 546 (sc-514346 AF546), Alexa Fluor<sup>®</sup> 594 (sc-514346 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-514346 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-514346 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-514346 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514346 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

KLRG2 (B-12) is recommended for detection of KLRG2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for KLRG2 siRNA (h): sc-89814, KLRG2 siRNA (m): sc-146557, KLRG2 shRNA Plasmid (h): sc-89814-SH, KLRG2 shRNA Plasmid (m): sc-146557-SH, KLRG2 shRNA (h) Lentiviral Particles: sc-89814-V and KLRG2 shRNA (m) Lentiviral Particles: sc-146557-V.

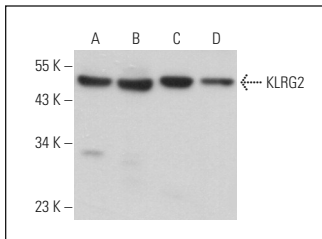
Molecular Weight of KLRG2 isoforms 1/2: 43/32 kDa.

Positive Controls: KLRG2 (h): 293T Lysate: sc-112008, SP2/0 whole cell lysate: sc-364795 or RPE-J cell lysate: sc-24771.

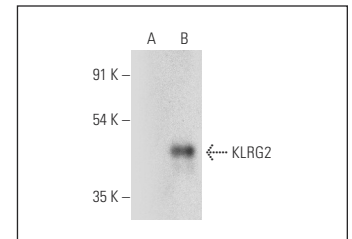
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



KLRG2 (B-12): sc-514346. Western blot analysis of KLRG2 expression in C2C12 (A), SP2/0 (B) and RPE-J (C) whole cell lysates and rat eye tissue extract (D).



KLRG2 (B-12): sc-514346. 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.

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