

GRHL1 (E-14): sc-168034

BACKGROUND

The grainyhead subfamily, whose members include GRHL1, GRHL2 and GRHL3, consist of orthologs of the *Drosophila* grainyhead (GRH) protein. In *Drosophila*, GRH is involved in early dorsal/ventral patterning and tissue development. The grainyhead subfamily members are, therefore, believed to act as transcription factors during development. GRHL1, GRHL2 and GRHL3 are localized to the nucleus and exist as homodimers or as heterodimers with each other. GRHL1 (grainyhead-like 1 (*Drosophila*)), also known as MGR, LBP32, NH32 or TFCP2L2, is a 618 amino acid nuclear protein that is highly expressed in kidney, brain, tonsil, liver, placenta and pancreas. Like other members of the grainyhead family, GRHL1, which exists as three alternatively spliced isoforms, is thought to function as a transcription factor. GRHL1 is known to bind and transactivate the EN-1 promoter and may play a role in epidermal differentiation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GRHL1 (human) mapping to 2p25.1; Grhl1 (mouse) mapping to 12 A1.3.

SOURCE

GRHL1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GRHL1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168034 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GRHL1 (E-14) is recommended for detection of GRHL1 of mouse, rat and 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 GRHL2 or GRHL3.

GRHL1 (E-14) is also recommended for detection of GRHL1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for GRHL1 siRNA (h): sc-95046, GRHL1 siRNA (m): sc-145760, GRHL1 shRNA Plasmid (h): sc-95046-SH, GRHL1 shRNA Plasmid (m): sc-145760-SH, GRHL1 shRNA (h) Lentiviral Particles: sc-95046-V and GRHL1 shRNA (m) Lentiviral Particles: sc-145760-V.

Molecular Weight of GRHL1: 70 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) Immunofluorescence: 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.

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.



Try **GRHL1 (D-2): sc-515541**, our highly recommended monoclonal alternative to GRHL1 (E-14).