

KLHDC8A (D-15): sc-131574

BACKGROUND

Kelch domain-containing protein 8A (KLHDC8A) is a 350 amino acid protein. KLHDC8A contains 7 kelch repeats, each of which is an approximately 50 amino acid long conserved region that forms a tertiary structure β -propeller. The gene that encodes KLHDC8A is located on chromosome 1, which is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1. Notably, the rare aging disease Hutchinson-Gilford progeria is associated with the LMNA gene which encodes Lamin A. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1. Aberrations in chromosome 1 are found in a variety of cancers including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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2. Adams, J., et al. 2000. The kelch repeat superfamily of proteins: propellers of cell function. *Trends Cell Biol.* 10: 17-24.
3. Prag, S., et al. 2003. Molecular phylogeny of the kelch-repeat superfamily reveals an expansion of BTB/kelch proteins in animals. *BMC Bioinformatics* 4: 42.
4. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.
5. Scaffidi, P., et al. 2006. Lamin A-dependent nuclear defects in human aging. *Science* 312: 1059-1063.
6. Lans, H., et al. 2006. Cell biology: ageing nucleus gets out of shape. *Nature* 440: 32-34.
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CHROMOSOMAL LOCATION

Genetic locus: KLHDC8A (human) mapping to 1q32.1; Klhdc8 (mouse) mapping to 1 E4.

SOURCE

KLHDC8A (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KLHDC8A of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-131574 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLHDC8A (D-15) is recommended for detection of KLHDC8A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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); non cross-reactive with KLHDC family members.

KLHDC8A (D-15) is also recommended for detection of KLHDC8A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for KLHDC8A siRNA (h): sc-88305, KLHDC8A siRNA (m): sc-146508, KLHDC8A shRNA Plasmid (h): sc-88305-SH, KLHDC8A shRNA Plasmid (m): sc-146508-SH, KLHDC8A shRNA (h) Lentiviral Particles: sc-88305-V and KLHDC8A shRNA (m) Lentiviral Particles: sc-146508-V.

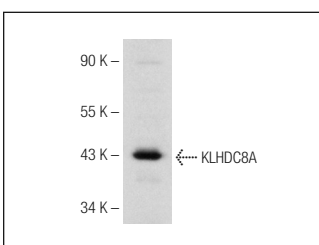
Molecular Weight of KLHDC8A: 39 kDa.

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

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



KLHDC8A (D-15): sc-131574. Western blot analysis of KLHDC8A expression in MCF7 whole cell lysate.

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.