

KLHL1 (T-15): sc-79554

BACKGROUND

KLHL1 (kelch-like protein 1) is a 748 amino acid protein that is the homolog of the *Drosophila* kelch protein. Localized to the cytoskeleton, KLHL1 contains six kelch repeats and one BTB (POZ) domain. The BTB (broad-complex, tram-track and Bric a brac) domain, also known as the POZ (poxvirus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C₂H₂-type zinc fingers. KLHL1 is highly expressed in brain where it acts as an actin-organization protein, possibly playing a role in the modulation of neurite outgrowth. KLHL1 expression has been shown to be downregulated by spinocerebellar ataxia type 8 (SCA8) protein, which then leads to SCA8 neuropathogenesis, a disease that is characterized by limb and truncal ataxia, ataxic dysarthria and horizontal nystagmus.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: KLHL1 (human) mapping to 13q21.33; Klhl1 (mouse) mapping to 14 E2.1.

SOURCE

KLHL1 (T-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of KLHL1 of human origin.

PRODUCT

Each vial contains 100 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-79554 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KLHL1 (T-15) is recommended for detection of KLHL1 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).

KLHL1 (T-15) is also recommended for detection of KLHL1 in additional species, including equine and porcine.

Suitable for use as control antibody for KLHL1 siRNA (h): sc-75393, KLHL1 siRNA (m): sc-75394, KLHL1 shRNA Plasmid (h): sc-75393-SH, KLHL1 shRNA Plasmid (m): sc-75394-SH, KLHL1 shRNA (h) Lentiviral Particles: sc-75393-V and KLHL1 shRNA (m) Lentiviral Particles: sc-75394-V.

Molecular Weight of KLHL1: 83 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

PROTOCOLS

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