

UNKL (S-12): sc-138717

BACKGROUND

UNKL (unkempt homolog (*Drosophila*)-like), also known as RING finger protein unkempt-like, putative E3 ubiquitin-protein ligase UNKL, ZC3H5L or ZC3HDC5L, is a 680 amino acid protein that exists as six alternatively spliced isoforms belonging to the unkempt family. UNKL isoform 4, which interacts with SMARCD2, primarily localizes to the cytoplasm but also has the ability to shuttle itself to the nucleus. UNKL is thought to play a role in protein ubiquitination and contains four C3H1-type zinc fingers and one RING-type zinc finger. The gene encoding UNKL maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. *Nat. Genet.* 26: 370-374.
4. Daniels, R.J., et al. 2001. Sequence, structure and pathology of the fully annotated terminal 2 Mb of the short arm of human chromosome 16. *Hum. Mol. Genet.* 10: 339-352.
5. Kuhlensäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. *Neurology* 58: 1273-1276.
6. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. *Curr. Gastroenterol. Rep.* 6: 467-473.
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CHROMOSOMAL LOCATION

Genetic locus: UNKL (human) mapping to 16p13.3.

SOURCE

UNKL (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UNKL of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-138717 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-138717 X, 200 µg/0.1 ml.

APPLICATIONS

UNKL (S-12) is recommended for detection of UNKL of 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 UNK.

Suitable for use as control antibody for UNKL siRNA (h): sc-92989, UNKL shRNA Plasmid (h): sc-92989-SH and UNKL shRNA (h) Lentiviral Particles: sc-92989-V.

UNKL (S-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of UNKL isoforms: 74/25/20/25/32/82 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.

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.