# ANKHD1 (N-14): sc-160962



The Power to Question

#### **BACKGROUND**

ANKHD1 (ankyrin repeat and KH domain containing 1), also known as MASK or VBARP, is a 2,542 amino acid protein that localizes to the cytoplasm and contains one KH domain and 25 ankyrin repeats. Expressed ubiquitously as multiple alternatively spliced isoforms, one of which exhibits higher expression in spleen and another of which is present at high levels in brain and cervix, ANKHD1 functions as a scaffolding protein that interacts with SH-PTP2 and may be associated with tumor progression. Specifically, ANKHD1 is thought to posses anti-apoptotic effects that are essential for cell survival and may be associated with the abnormal phenotype of leukemia cells. The gene encoding ANKHD1 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome.

## **REFERENCES**

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- Poulin, F., et al. 2003. Gene fusion and overlapping reading frames in the mammalian genes for 4E-BP3 and MASK. J. Biol. Chem. 278: 52290-52297.
- Miles, M.C., et al. 2005. Molecular and functional characterization of a novel splice variant of ANKHD1 that lacks the KH domain and its role in cell survival and apoptosis. FEBS J. 272: 4091-4102.
- 4. Santos Duarte, A.d.a. S., et al. 2005. Characterisation of a new splice variant of MASK-BP3(ARF) and MASK human genes, and their expression patterns during haematopoietic cell differentiation. Gene 363: 113-122.
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# CHROMOSOMAL LOCATION

Genetic locus: ANKHD1/ANKHD1-EIF4EBP3 (human) mapping to 5q31.3; Ankhd1 (mouse) mapping to 18 B2.

## **SOURCE**

ANKHD1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ANKHD1 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160962 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **STORAGE**

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

#### **APPLICATIONS**

ANKHD1 (N-14) is recommended for detection of ANKHD1 isofoms 1-5 and MASK-BP3 of mouse 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).

ANKHD1 (N-14) is also recommended for detection of ANKHD1 isofoms 1-5 and MASK-BP3 in additional species, including equine, canine and porcine.

Molecular Weight of full length ANKHD1: 270 kDa.

Molecular Weight of VBARP-L isoform: 69 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MCF7 whole cell lysate: sc-2206 or Jurkat whole cell lysate: sc-2204.

#### **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.

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