

TRIM61 (E-12): sc-136942

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM61 (tripartite motif-containing protein 61), also known as RNF35 (RING finger protein 35), is a 209 amino acid protein that contains a variety of domains that are characteristic to TRIM proteins, including a RING-type zinc finger and a B box-type zinc finger. In mice, TRIM61 is temporarily transcribed in the early embryo, but then is permanently silenced before the blastocyst stage of development. Transcription of TRIM61 is positively regulated by nuclear factor Y (NF-Y). The gene encoding TRIM61 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes.

REFERENCES

1. Chen, H.H., et al. 2002. Use of a common promoter by two juxtaposed and intronless mouse early embryonic genes, Rnf33 and Rnf35: implications in zygotic gene expression. *Genomics* 80: 140-143.
2. Choo, K.B., et al. 2002. Different modes of regulation of transcription and pre-mRNA processing of the structurally juxtaposed homologs, Rnf33 and Rnf35, in eggs and in pre-implantation embryos. *Nucleic Acids Res.* 30: 4836-4844.
3. Goldfrank, D., et al. 2003. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 4. Genet. Test.* 7: 351-372.
4. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the mammalian gene collection (MGC). *Genome Res.* 14: 2121-2127.
5. Huang, C.J., et al. 2005. Transcriptional modulation of the pre-implantation embryo-specific Rnf35 gene by the Y-box protein NF-Y/CBF. *Biochem. J.* 387: 367-375.
6. Huang, C.J., et al. 2005. Negative transcriptional modulation and silencing of the bi-exonic Rnf35 gene in the preimplantation embryo. Binding of the CCAAT-displacement protein/Cux to the untranslated exon 1 sequence. *J. Biol. Chem.* 280: 30681-30688.
7. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
8. Racki, W.J. and Richter, J.D. 2006. CPEB controls oocyte growth and follicle development in the mouse. *Development* 133: 4527-4537.

CHROMOSOMAL LOCATION

Genetic locus: TRIM61 (human) mapping to 4q32.3.

SOURCE

TRIM61 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TRIM61 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-136942 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM61 (E-12) is recommended for detection of TRIM61 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 other TRIM family members .

Suitable for use as control antibody for TRIM61 siRNA (h): sc-89032, TRIM61 shRNA Plasmid (h): sc-89032-SH and TRIM61 shRNA (h) Lentiviral Particles: sc-89032-V.

Molecular Weight of TRIM61: 24 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.