

# TRIL (C-16): sc-244490

## BACKGROUND

TRIL (TLR4 interactor with leucine rich repeats), also known as Leucine-rich repeat-containing protein KIAA0644, is a 811 amino acid single-pass membrane protein that is highly expressed in brain with lower expression in lung, kidney, ovary, spleen and small intestine. TRIL is a component of the TLR4 signaling complex, which mediates the innate immune response to bacterial lipopolysaccharide (LPS) and leading to cytokine secretion. TRIL interaction with TLR4 is enhanced by LPS stimulation. The gene encoding TRIL maps to human chromosome 7, which is about 158 million bases long and encodes over 1,000 genes. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

## REFERENCES

1. Tspouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro  $\alpha$  2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. *J. Clin. Invest.* 72: 1262-1267.
2. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. *Proc. Natl. Acad. Sci. USA* 95: 3781-3785.
3. Waterston, R.H., et al. 2003. The human genome: genes, pseudogenes, and variation on chromosome 7. *Cold Spring Harb. Symp. Quant. Biol.* 68: 13-22.
4. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. *Nature* 424: 157-164.
5. Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? *Cell. Mol. Life Sci.* 63: 1867-1875.
6. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. *Cancer Genet. Cytogenet.* 173: 10-16.

## CHROMOSOMAL LOCATION

Genetic locus: TRIL (human) mapping to 7p14.3; Tril (mouse) mapping to 6 B3.

## SOURCE

TRIL (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of TRIL 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  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244490 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TRIL (C-16) is recommended for detection of TRIL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

TRIL (C-16) is also recommended for detection of TRIL in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for TRIL siRNA (h): sc-89737, TRIL siRNA (m): sc-108206, TRIL shRNA Plasmid (h): sc-89737-SH, TRIL shRNA Plasmid (m): sc-108206-SH, TRIL shRNA (h) Lentiviral Particles: sc-89737-V and TRIL shRNA (m) Lentiviral Particles: sc-108206-V.

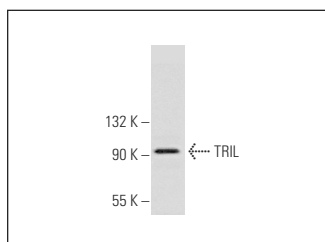
Molecular Weight of TRIL: 89 kDa.

Positive Controls: mouse brain extract: sc-2253.

## 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



TRIL (C-16): sc-244490. Western blot analysis of TRIL expression in mouse brain tissue extract.

## RESEARCH USE

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