



# GTPBP2 (h): 293T Lysate: sc-117110

## BACKGROUND

Small G proteins act as molecular switches for regulation of variety of cellular processes, such as nuclear transport, signal transduction, membrane trafficking and protein synthesis. GTPBP2 (GTP-binding protein 2) is a 602 amino acid G protein that is expressed in kidney, skeletal muscle, testis, brain and thymus, though it is not detected in liver. Expression of GTPBP2 is enhanced by  $\gamma$ -interferon stimulation in HeLa cells, THP-1 cells and thioglycollate-elicited mouse peritoneal macrophages. There are four isoforms of GTPBP2 that are expressed as a result of alternative splicing events. Since mutation of the gene encoding GTPBP1 does not lead to any phenotypic abnormalities, it is thought that there may be a genetic redundancy to make up for GTPBP1 lack-of-function. GTPBP2 shares 44% sequence similarity with GTPBP1 and also overlaps in expression pattern, suggesting that the GTPBP2 gene may compensate for GTPBP1 genetic abnormalities.

## REFERENCES

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2. Watanabe, M., et al. 2000. Cloning, expression analysis, and chromosomal mapping of GTPBP2, a novel member of the G protein family. *Gene* 256: 51-58.
3. Senju, S., et al. 2000. Immunocytochemical analyses and targeted gene disruption of GTPBP1. *Mol. Cell. Biol.* 20: 6195-6200.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607434. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Mungall, A.J., et al. 2003. The DNA sequence and analysis of human chromosome 6. *Nature* 425: 805-811.
6. Mulholland, P.J., et al. 2006. Genomic profiling identifies discrete deletions associated with translocations in glioblastoma multiforme. *Cell Cycle* 5: 783-791.

## CHROMOSOMAL LOCATION

Genetic locus: GTPBP2 (human) mapping to 6p21.1.

## PRODUCT

GTPBP2 (h): 293T Lysate represents a lysate of human GTPBP2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

GTPBP2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GTPBP2 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.