## SANTA CRUZ BIOTECHNOLOGY, INC.

# TARSH (S-12): sc-99656



### BACKGROUND

TARSH [ABI family, member 3 (NESH) binding protein], whose alternative names include target of Nesh-SH3, Nesh-binding protein, ABI gene family member 3-binding protein, NESHBP, FLJ41743, FLJ41754 or ABI3BP, is a 1,075 amino acid protein involved in cellular senescence and tumor suppression. Loss of TARSH expression may play a role in the pathogenesis of cancer, especially in thyroid and lung. TARSH acts as a signal transduction molecule and is presumed to interact with with Abi-3, a protein involved in inhibition of ectopic metastasis of tumor cells. TARSH is expressed in brain, lung, heart, liver, placenta, pancreas and kidney, and four TARSH isoforms exist as a result of alternative splicing. TARSH contains a SH3 binding motif and a nuclear targeting sequence. The gene encoding TARSH maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

#### REFERENCES

- 1. De Jonghe, P., Timmerman, V., FitzPatrick, D., Spoelders, P., Martin, J.J. and Van Broeckhoven, C. 1997. Mutilating neuropathic ulcerations in a chromosome 3q13-q22 linked Charcot-Marie-Tooth disease type 2B family. J. Neurol. Neurosurg. Psychiatr. 62: 570-573.
- 2. Matsuda, S., Iriyama, C., Yokozaki, S., Ichigotani, Y., Shirafuji, N., Yamaki, K., Hayakawa, T. and Hamaguchi, M. 2001. Cloning and sequencing of a novel human gene that encodes a putative target protein of Nesh-SH3. J. Hum. Genet. 46: 483-486.
- 3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606279. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 4. Braga, E.A., Kashuba, V.I., Maliukova, A.V., Loginov, V.I., Senchenko, V.N., Bazov, I.V., Kiselev, L.L. and Zabarovski , E.R. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. Mol. Biol. 37: 194-211.
- 5. Tsend-Ayush, E., Grützner, F., Yue, Y., Grossmann, B., Hänsel, U., Sudbrak, R. and Haaf, T. 2004. Plasticity of human chromosome 3 during primate evolution. Genomics 83: 193-202.
- 6. Uekawa, N., Terauchi, K., Nishikimi, A., Shimada, J. and Maruyama, M. 2005. Expression of TARSH gene in MEFs senescence and its potential implication in human lung cancer. Biochem. Biophys. Res. Commun. 329: 1031-1038.
- 7. Terauchi, K., Shimada, J., Uekawa, N., Yaoi, T., Maruyama, M. and Fushiki, S. 2006. Cancer-associated loss of TARSH gene expression in human primary lung cancer. J. Cancer Res. Clin. Oncol. 132: 28-34.
- 8. Wakoh, T., Uekawa, N., Terauchi, K., Sugimoto, M., Ishigami, A., Shimada, J. and Maruyama, M. 2009. Implication of p53-dependent cellular senescence related gene, TARSH in tumor suppression. Biochem. Biophys. Res. Commun. 380: 807-812.

#### **STORAGE**

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

#### CHROMOSOMAL LOCATION

Genetic locus: ABI3BP (human) mapping to 3q12.

#### SOURCE

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

#### PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99656 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

TARSH (S-12) is recommended for detection of TARSH 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).

Suitable for use as control antibody for TARSH siRNA (h): sc-77934, TARSH shRNA Plasmid (h): sc-77934-SH and TARSH shRNA (h) Lentiviral Particles: sc-77934-V.

Molecular Weight of TARSH: 119 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<sup>™</sup> 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<sup>™</sup> 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.

#### MONOS Try TARSH (H-8): sc-398847, our highly recommended Satisfation monoclonal alternative to TARSH (S-12). Guaranteed