Data Sheet (Cat.No.TMPY-02037)

TargetMol

TSC22D1 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	Tgfb1i4;TSC-22;Tsc;Egr5;Tsc22;TSC22 domain family, member 1;AA589566;AW105905
Protein Construction:	A DNA sequence encoding the mouse Tsc22d1 (NP_033392.1) (Met1-Ala143) was expressed with a polyhistidine tag at the N-terminus. Predicted N terminal: Met
Species:	Mouse
Expression Host:	E. coli
Accession:	P62500-2
Molecular Weight:	17.8 kDa (predicted)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE.
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

TSC22 domain family, member 1 (TSC22D1) is one of the TGF-beta-stimulated clone-22 (TSC-22). TSC-22 was reported to be a differentiation-inducing factor that negatively regulates the growth of salivary gland cancer cells. TSC22D1, which encodes transforming growth factor beta-stimulated clone 22 (TSC-22), is thought to be a tumor suppressor because its expression is lost in many glioblastoma, salivary gland, and prostate cancers. TSC-22 is the founding member of the TSC-22/DIP/Bun family of leucine zipper transcription factors. TSC-22 may play an

important role in maintaining the differentiated phenotype in salivary gland tumors, and may be a possible target of leukemia therapy. TSC22D1 forms homodimers via its conserved leucine zipper domain and heterodimerizes with TSC22D4. TSC22D1 has transcriptional repressor activity.

Reference

Doi Y, et al. (2008) Expression and cellular localization of TSC-22 in normal salivary glands and salivary gland tumors: implications for tumor cell differentiation. Oncol Rep. 19(3): 609-16.
Wu X, et al. (2008) The Drosophila homolog of human tumor suppressor TSC-22 promotes cellular growth, proliferation, and survival. Proc Natl Acad Sci U S A. 105(14): 5414-9.
Lu Y, et al. (2007) Identification of TSC-22 as a potential tumor suppressor that is upregulated by Flt3-D835V but not Flt3-ITD. Leukemia. 21(11): 2246-57.

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