Data Sheet (Cat.No.TMPY-02883)

TargetMol

C1D Protein, Human, Recombinant (GST)

General Information

Synonyms:	SUNCOR;Rrp47;SUN-CoR;hC1D;C1D nuclear receptor corepressor;LRP1
Protein Construction:	A DNA sequence encoding the human C1D (Q13901) (Met 1-Ser 141) was fused with the GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	Q13901
Molecular Weight:	43.2 kDa (predicted); 43 kDa (reducing conditions)

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:	> 80 % 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 7.5. 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

C1D nuclear receptor corepressor belongs to the C1D family. It is a DNA binding and apoptosis-inducing protein. C1D nuclear receptor corepressorinteracts with TSNAX and DNA-PKcs. It acts as a corepressor for the thyroid hormone receptor. It is thought that C1D nuclear receptor corepressor regulates TRAX/Translin complex formation. It is expressed in kidney, heart, brain, spleen, lung, testis, liver and small intestine. It plays a role in the recruitment of the RNA exosome complex to pre-rRNA to mediate the 3'-5' end processing of the 5.8S rRNA; this function may

include MPHOSPH6. It potentiates transcriptional repression by NR1D1 and THRB. C1D nuclear receptor corepressorcan activate PRKDC not only in the presence of linear DNA but also in the presence of supercoiled DNA. It also can induce apoptosis in a p53/TP53 dependent manner.

Reference

Schilders G,et al. (2007) C1D and hMtr4p associate with the human exosome subunit PM/Scl-100 and are involved in pre-rRNA processing. Nucleic Acids Res. 35(8):2564-72.
Erdemir T,et al. (2002) DNA damage-dependent interaction of the nuclear matrix protein C1D with Translin-associated factor X (TRAX). J Cell Sci. 115(Pt 1):207-16.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481