

CISD1 Protein, Human, Recombinant (His)

General Information

Synonyms:	ZCD1;CDGSH iron sulfur domain 1;C10orf70;mitoNEET;MDS029
Protein Construction:	A DNA sequence encoding the human CISD1 (NP_060934.1) (Lys32-Thr108) was expressed with a polyhistidine tag at the N-terminus. Predicted N terminal: His
Species:	Human
Expression Host:	E. coli
Accession:	Q9NZ45
Molecular Weight:	11.3 kDa (predicted); 14 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:	> 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 20 mM Tris, 150 mM NaCl, 10% glycerol. 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

Mitochondrial dysfunction is thought to play a significant role in neurodegeneration observed in Parkinson's disease (PD), the loss of mitoNEET (CISD1), an iron-sulfur containing protein that regulates mitochondrial bioenergetics, results in mitochondrial dysfunction and loss of striatal dopamine and tyrosine hydroxylase. CDGSH iron sulfur domain 1 (CISD1, also termed mitoNEET), an iron-containing outer mitochondrial membrane protein, negatively regulates ferroptotic cancer cell death. At the cellular level, CISD1 gene expression increased during

human adipocyte differentiation in correlation with adipogenic genes. Thus it is a possible role of C1SD1 in obesity-associated dysfunctional adipogenesis in human VAT.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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