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Product datasheet

Recombinant Human GPD1L protein ab113595

1 Image

Description

Product name	Recombinant Human GPD1L protein
Purity	> 95 % SDS-PAGE. ab113595 was purified using conventional chromatography.
Expression system	Escherichia coli
Accession	Q8N335
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	**MGSSHHHHHHSSGLVPRGSH**MAAAPLKVCIVGSGNWG SAVAKIIGNNVKK LQKFASTVKMWVFEETVNGRKLTDIINNDHENVKYLPGHK LPENVVAMSN LSEAVQDADLLVFVIPHQFIHRICDEITGRVPKKALGITLIKGI DEGPEG LKLISDIIREKMGIDISVLMGANIANEVAAEKFCETTIGSKVM ENGLLFK ELLQTPNFRITVVDDADTVELCGALKNIVAVGAGFCDGLR CGDNTKAAVI RLGLMEMIAFARIFCKGQVSTATFLESCGVADLITTCYGGR NRRVAEAFA RTGKTIEELEKEMLNGQKLQGPQTSAEVYRILKQKGLLDKF PLFTAVYQI CYESRPVQEMLSCLQSHPEHT
Predicted molecular weight	41 kDa including tags
Amino acids	1 to 351
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab113595** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE

	Mass Spectrometry
Mass spectrometry	MALDI-TOF
Form	Liquid

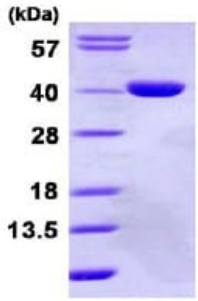
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.02% DTT, 0.32% Tris HCl, 20% Glycerol (glycerin, glycerine)

General Info

Function	Play a role in regulating cardiac sodium current; decreased enzymatic activity with resulting increased levels of glycerol 3-phosphate activating the DPD1L-dependent SCN5A phosphorylation pathway, may ultimately lead to decreased sodium current; cardiac sodium current may also be reduced due to alterations of NAD(H) balance induced by DPD1L.
Tissue specificity	Most highly expressed in heart tissue, with lower levels in the skeletal muscle, kidney, lung and other organs.
Involvement in disease	Defects in GPD1L are the cause of Brugada syndrome type 2 (BRS2) [MIM:611777]. BRS2 is an autosomal dominant tachyarrhythmia characterized by right bundle branch block and ST segment elevation on an electrocardiogram (ECG). It can cause the ventricles to beat so fast that the blood is prevented from circulating efficiently in the body. When this situation occurs (called ventricular fibrillation), the individual will faint and may die in a few minutes if the heart is not reset. Defects in GPD1L are a cause of sudden infant death syndrome (SIDS) [MIM:272120]. SIDS is the sudden death of an infant younger than 1 year that remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of clinical history. Pathophysiologic mechanisms for SIDS may include respiratory dysfunction, cardiac dysrhythmias, cardiorespiratory instability, and inborn errors of metabolism, but definitive pathogenic mechanisms precipitating an infant sudden death remain elusive.
Sequence similarities	Belongs to the NAD-dependent glycerol-3-phosphate dehydrogenase family.
Cellular localization	Cytoplasm. Localized to the region of the plasma membrane.

Images



SDS-PAGE - Recombinant Human GPD1L protein (ab113595)

15% SDS-PAGE analysis of ab113595 (3µg)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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