

Product Information

MemDX™ Membrane Protein Human SLC19A3 (Solute carrier family 19 member 3) for Antibody Discovery

Cat. No.: **MP0350J**

This product is for research use only and is not intended for diagnostic use.

This product is a 55.5 kDa Human SLC19A3 membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

SLC19A3

Protein Length

Full-length

Protein Class

Transmembrane

Molecular Weight

55.5 kDa

TMD

12

Sequence

MDCYRTSLSSSWIYPTVILCLFGFFSMMRPSEPFLIPYLSGPDKNLTSAEITNEIFPVWTYSYLVLLLPV
FVLTDYVRYKPVILQGIFITWLLLLFGQGVTMQVVEFFYGMVTAAEVAYYAYIYSVVSPEHYQRVS
GYCRSVTLAAYTAGSVLAQLLVSLANMSYFYLNVISLASVSVAFSLFLPMPKKSMMFFHAKPSREIKKS
SSVNPVLEETHEGEAPGCEEQKPTSEILSTSGKLNKGQLNSLKPSNVTVDVVFVQWFQDLKECYSSKRLFY
WSLWWAFATAGFNQVLNYYQILWDYKAPSQDSSIYNGAVEAIATFGGAVAAFAVG YVKVNWDLLGELALV
VFSVVNAGSLFLMHTANIWACYAGYLIFKSSYMLLITIAVFQIAVNLNVERYALVFGINTFIALVIQTI
MTVIVVDQRGLNLPVSIQFLVYGSYFAVIAGIFLMRSMYITYSTKSQKDVQSPAPSENPDVSHPEEESNI
IMSTKL

Product Description

Expression Systems

HEK293T

Tag

C-Myc/DDK

Form

Liquid

Purification

Anti-DDK affinity column followed by conventional chromatography steps

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

SLC19A3

Full Name

Solute carrier family 19 member 3

Introduction

This gene encodes a ubiquitously expressed transmembrane thiamine transporter that lacks folate transport activity. Mutations in this gene cause biotin-responsive basal ganglia disease (BBGD); a recessive disorder manifested in childhood that progresses to chronic encephalopathy, dystonia, quadriparesis, and death if untreated. Patients with BBGD have bilateral necrosis in the head of the caudate nucleus and in the putamen. Administration of high doses of biotin in the early progression of the disorder eliminates pathological symptoms while delayed treatment results in residual paraparesis, mild cognitive disability, or dystonia. Administration of thiamine is ineffective in the treatment of this disorder. Experiments have failed to show that this protein can transport biotin. Mutations in this gene also cause a Wernicke's-like encephalopathy.

Alternative Names

BBGD; THMD2; THTR2; thTr-2

Gene ID

[80704](#)

UniProt ID

[Q9BZV2](#)