The ClinGen Evidence Repository is an **FDA-recognized human genetic variant database** containing expert-curated assertions regarding variants' pathogenicity and supporting evidence summaries. [Disclaimer]

Variant: NM_001142805.2:c.634G>T

Version: 1.0

CA415079466

2446445 (ClinVar)

Gene: SLC6A8 (HGNC:6535)
Condition: creatine transporter deficiency (MONDO:0010305)
Inheritance Mode: X-linked inheritance
UUID: 4df73c5b-5495-46cf-b2b3-46f61ba1dcd6
Approved on: 2023/3/9
Published on: 2023/3/9

HGVS expressions

NM_001142805.2:c.634G>T
NC_000023.11:g.153691543G>T
CM000685.2:g.153691543G>T
NC_000023.10:g.152956998G>T
CM000685.1:g.152956998G>T
NC_000023.9:g.152610192G>T
NG_012016.1:g.8247G>T
NG_012016.2:g.8247G>T
ENST00000253122.10:c.634G>T
ENST00000675713.1:n.388G>T
ENST00000253122.9:c.634G>T
ENST00000429147.1:c.83G>T
ENST00000430077.6:c.289G>T
ENST00000466243.1:n.426G>T
ENST00000467402.1:n.145+36G>T
NM_001142805.1:c.634G>T
NM_001142806.1:c.289G>T
NM_005629.3:c.634G>T
NM_005629.4:c.634G>T

Pathogenic

Met criteria codes 3

PVS1 PP4_Strong PM2_Supporting

Evidence Links 0

Expert Panel

Cerebral Creatine Deficiency Syndromes VCEP

Criteria Specification Information

Criteria Specification: *ClinGen Cerebral Creatine Deficiency Syndromes Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for SLC6A8 Version 1.1.0*
Criteria Specification Approval History
Criteria Specifications for this VCEP

Evidence submitted by expert panel

Cerebral Creatine Deficiency Syndromes VCEP

The NM_005629.4:c.634G>T (p.Glu212Ter) variant in SLC6A8 is a nonsense variant predicted to cause a premature stop codon in biologically-relevant-exon 3/13, leading to nonsense mediated decay in a gene in which loss-of-function is an established disease mechanism (PVS1). One male patient has been reported with clinical features consistent with creatine transporter deficiency, elvated urine creatine/creatinine ratio (1 point) and brain MRS showing decreased creatine peak (PMID: 29435807) (PP4_Strong). The variant is absent in gnomAD v2.1.1. (PM2_Supporting). In summary, this variant meets the citeria to be classified as pathogenic for creatine transporter deficiency. SLC6A8-specific crietria met, as specified by the ClinGen CCDS VCEP (Specifications Version 1.1.0): PVS1, PP4_Strong, PM2_Supporting. (Classification approved by the ClinGen CCDS VCEP on March 9, 2023)

Met criteria codes

PVS1	✔	The NM_005629.4:c.634G>T (p.Glu212Ter) variant in SLC6A8 is a nonsense variant predicted to cause a premature stop codon in biologically-relevant-exon 3/13, leading to nonsense mediated decay in a gene in which loss-of-function is an established disease mechanism (PVS1).
PP4_Strong	✔	One male patient has been reported with clinical features consistent with creatine transporter deficiency, elvated urine creatine/creatinine ratio (1 point) and brain MRS showing decreased creatine peak (PMID: 29435807) (PP4_Strong).
PM2_Supporting	✔	The variant is absent in gnomAD v2.1.1. (PM2_Supporting).

Curation History

Showing 1 to 1 of 1 rows

The information on this website is not intended for direct diagnostic use or medical decision-making without review by a genetics professional. Individuals should not change their health behavior solely on the basis of information contained on this website. If you have questions about the information contained on this website, please see a health care professional.

ClinGen Terms of Use.
¤ Powered by BCM's Genboree.