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_000350.3(ABCA4):c.6568C>T (p.Gln2190Ter)

Version: 1.0

CA341276562

1440605 (ClinVar)

Gene: ABCA4 (HGNC:24)
Condition: ABCA4-related retinopathy (MONDO:0800406)
Inheritance Mode: Autosomal recessive inheritance
UUID: 9867a15a-1a5f-4540-967e-bd339e71ab11
Approved on: 2025/12/5
Published on: 2025/12/19

HGVS expressions

NM_000350.3:c.6568C>T
NM_000350.3(ABCA4):c.6568C>T (p.Gln2190Ter)
NC_000001.11:g.93998022G>A
CM000663.2:g.93998022G>A
NC_000001.10:g.94463578G>A
CM000663.1:g.94463578G>A
NC_000001.9:g.94236166G>A
NG_009073.1:g.128128C>T
ENST00000370225.4:c.6568C>T
ENST00000370225.3:c.6568C>T
ENST00000536513.5:c.2944C>T
NM_000350.2:c.6568C>T

Pathogenic

Met criteria codes 3

PM2_Supporting PM3 PVS1

Not Met criteria codes 2

PP4 PS4

Evidence Links 0

Expert Panel

ABCA4 VCEP

Criteria Specification Information

Criteria Specification: *ClinGen ABCA4 Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for ABCA4 Version 1.0.0*
Criteria Specification Approval History
Criteria Specifications for this VCEP

Evidence submitted by expert panel

ABCA4 VCEP

The NM_000350.3:c.6568C>T (p.Gln2190Ter) variant in ABCA4 is a nonsense variant predicted to cause a premature stop codon in biologically relevant exon 48/50 leading to nonsense mediated decay in a gene in which loss-of-function is an established disease mechanism (PVS1). This variant is absent from gnomAD v4.1.0 (PM2_Supporting). This variant has been identified in trans with a known pathogenic variant [ABCA4 c.5882G>A; p.Gly1961Glu] (VCEP communication - publication in press; PM3). In summary, this variant meets the criteria to be classified as pathogenic for ABCA4-related retinopathy based on the ACMG/AMP criteria applied, as specified by the ClinGen ABCA4 VCEP (Specification Version 1): PVS1, PM3, PM2_Supporting.

Met criteria codes

PM2_Supporting	✔	Absent in population databases; No population data was found for this allele in gnomAD or ExAC.
PM3	✔	Proband with Stargardt disease with ABCA4 c.5882G>A; p.Gly1961Glu, previously classified as pathogenic by the ABCA4 VCEP, and the ABCA4 c.6568C>T; p.Gln2190Ter variant in trans with phase confirmed (1 point).
PVS1	✔	This is a null variant where loss of function is a known mechanism of disease. This variant creates a premature stop codon.

Not Met criteria codes

PP4	✖	Reported in this article in an individual with macular degeneration and found in a heterozygous state PMID: 11818392
PS4	✖	Variant is not present in the Cornelis, et al. 2022 (PMID: 35120629)

Curation History

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