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_002055.5(GFAP):c.1087A>G (p.Ile363Val)

Version: 1.0

CA399843481

1685846 (ClinVar)

Gene: GFAP (HGNC:2670)
Condition: Alexander disease (MONDO:0008752)
Inheritance Mode: Autosomal dominant inheritance
UUID: 8197c795-e32f-47d5-8625-9c225e035487
Approved on: 2026/8/18
Published on: 2026/8/18

HGVS expressions

NM_002055.5:c.1087A>G
NM_002055.5(GFAP):c.1087A>G (p.Ile363Val)
NC_000017.11:g.44911276T>C
CM000679.2:g.44911276T>C
NC_000017.10:g.42988644T>C
CM000679.1:g.42988644T>C
NC_000017.9:g.40344170T>C
NG_008401.1:g.9271A>G
ENST00000253408.11:c.1087A>G
ENST00000435360.8:c.1087A>G
ENST00000253408.10:c.1087A>G
ENST00000435360.7:c.1087A>G
ENST00000585543.6:n.240A>G
ENST00000586125.2:c.22A>G
ENST00000586127.6:n.1616A>G
ENST00000586793.6:c.952A>G
ENST00000587997.6:n.563A>G
ENST00000588735.3:c.1087A>G
ENST00000591327.2:n.2241A>G
ENST00000591880.2:c.17A>G
ENST00000592320.6:c.664A>G
ENST00000638281.1:c.1087A>G
ENST00000638304.1:c.6A>G
ENST00000638488.1:n.28A>G
ENST00000638618.1:c.742A>G
ENST00000639042.1:c.24A>G
ENST00000639277.1:c.1087A>G
ENST00000639921.1:c.44A>G
ENST00000640552.1:n.1101A>G
ENST00000253408.9:c.1087A>G
ENST00000435360.6:c.1087A>G
ENST00000585543.5:n.240A>G
ENST00000586793.5:c.1087A>G
ENST00000587997.5:c.563A>G
ENST00000588640.5:n.467A>G
ENST00000588735.1:c.83-3160A>G
ENST00000592320.5:c.664A>G

NM_001131019.2:c.1087A>G
NM_001242376.1:c.1087A>G
NM_002055.4:c.1087A>G
NM_001363846.1:c.1087A>G
NM_001131019.3:c.1087A>G
NM_001242376.2:c.1087A>G
NM_001242376.3:c.1087A>G
NM_001363846.2:c.1087A>G

Likely Pathogenic

Met criteria codes 3

PS4_Moderate PM2_Supporting PS2

Evidence Links 0

Expert Panel

Leukodystrophy and Leukoencephalopathy VCEP

Criteria Specification Information

- **Criteria Specification:** *ClinGen Leukodystrophy and Leukoencephalopathy Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for GFAP Version 1.0*
- **Criteria Specification Approval History**
- **Criteria Specifications for this VCEP**

Evidence submitted by expert panel

Leukodystrophy and Leukoencephalopathy VCEP

The NM_002055.5(GFAP):c.259G>A, variant in GFAP is a missense variant predicited to cause a substitution of valine by isoleucine at amino acid 87 (p.Val87Ile). This variant has been identified as a de novo occurrences with confirmed paternal relationships in two individuals who met diagnostic criteria for Alexander Disease per ClinGen Leukodystrophy and Leukoencephalopathy Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for GFAP Version 1.0.0 (PS2, PS4_[Supporting]; PMID: 29057636, internal communication). This variant is absent from gnomAD v[4.1.1] (PM2_Supporting). In summary, this variant meets the criteria to be classified Likely Pathogenic for Alexander Disease based on the ACMG/AMP criteria applied, as specified by the ClinGen Leukodystrophy and Leukoencephalopathy VCEP: PS2, PS4_Moderate, PM2_Supporting (ClinGen Leukodystrophy and Leukoencephalopathy VCEP Specifications Version 1.0.0).

Met criteria codes

PS4_Moderate	✔	This variant has been reported in two probands who met diagnostic criteria for Alexander Disease per ClinGen Leukodystrophy and Leukoencephalopathy Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for GFAP Version 1.0.0 (PS4_Moderate; PMID: 29057636, 1 internal case)
PM2_Supporting	✔	This variant is absent from gnomAD v[4.1.1] (PM2_Supporting).
PS2	✔	This variant has been identified as a de novo occurrence with confirmed paternal relationships in two individuals who met diagnostic criteria for Alexander Disease per ClinGen Leukodystrophy and Leukoencephalopathy Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for GFAP Version 1.0.0 (PS2; PMID: 29057636, 1 internal case)

Curation History

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See Report	Preferred Variant Title	Classification	Condition	Published Date	Version	Criteria Specification	Gene
View	NM_002055.5(GFAP):c.1087A>G (p.Ile3...	Likely Pathogenic	Alexander Disease	2026-08-18	1.0	ClinGen Leukodystrophy and Leukoencephalopathy Expert Panel Specifications to the ACMG/AMP Variant Interpretation Guidelines for GFAP Version 1.0	GFAP

Showing 1 to 1 of 1 rows

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