

F649= — WFS1 Molecular Atlas Card

Variant type: Synonymous (silent)

Codon: position 649 (Phenylalanine, F) — amino acid unchanged

Domain context: C-terminal ER-luminal (calcium binding, calmodulin, chaperone)

SCHEMA CATEGORY: SILENT — SILENT — NO AMINO-ACID CHANGE

No amino-acid change (F649 is unchanged): the codon is altered but the protein sequence is identical to wild-type. No structural, stability or AlphaMissense effect applies. Synonymous variants are typically benign unless they affect splicing or regulatory elements; this one is not adjacent to an exon boundary.

CLINICAL EVIDENCE

- **Classification:** Uncertain significance
 - **Review status:** criteria provided, single submitter
 - **cDNA change:** c.1947C>T
 - **ClinVar accession:** VCV000288933
 - **Last evaluated:** 2016/07/19 00:00
 - **Submissions:** 1
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Card generated by wolfram-atlas-batch (synonymous pipeline) on 2026-06-08T02:55:24.684773Z.

WFS1: UniProt O76024, AlphaFold v6. Synonymous variants carry no protein-structural effect.