

4p16.3-q35.2 duplication — WFS1 Molecular Atlas Card

Variant type: Copy-number variant (duplication)

Region: Chromosome 4p16.3-q35.2 (gene-level structural event)

CNV-GAIN — COPY-NUMBER DUPLICATION — 4P16.3-Q35.2

This is a large copy-number duplication spanning 4p16.3-q35.2 — a gene-level event causing an extra copy of this region (gene over-dosage / partial trisomy). CNVs act by dosage rather than by altering a single residue, so AlphaFold residue mapping, $\Delta\Delta G$, NMD and AlphaMissense don't apply. Therapeutically these are gene-replacement candidates (restore a working copy); per-residue chaperone/readthrough strategies are not relevant. Confirm breakpoints and gene content against the ClinVar record below.

CLINICAL EVIDENCE

- **Classification:** Pathogenic
 - **Review status:** no assertion criteria provided
 - **Associated conditions:** See cases
 - **ClinVar accession:** VCV000394609
 - **Genomic variant:** GRCh37/hg19 4p16.3-q35.2(chr4:12440-190904441)x3
 - **Last evaluated:** 1/01/01 00:00
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Card generated by *wolfram-atlas-batch* (CNV pipeline) on 2026-06-08T03:03:52.342574Z.

CNVs are gene-level events; WFS1 protein reference UniProt O76024 is not residue-mapped here.