

Variant: *NM_001110792.2(MECP2):c.1291C>T (p.Pro431Ser)*

Version: 1.0

CA198850 [↗](#)

156634 (ClinVar) [↗](#)

Gene: MECP2 ([HGNC:4204](#))

Condition: Rett syndrome ([MONDO:0010726](#))

Inheritance Mode: X-linked inheritance

UUID: e8117af8-b1e2-44b8-b051-c56e78e83078

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HGVS expressions

NM_001110792.2(MECP2):c.1291C>T (p.Pro431Ser)

NM_001110792.2:c.1291C>T

NC_000023.11:g.154030573G>A

CM000685.2:g.154030573G>A

NC_000023.10:g.153296024G>A

CM000685.1:g.153296024G>A

NC_000023.9:g.152949218G>A

NG_007107.2:g.111555C>T

NG_007107.3:g.111531C>T

ENST00000303391.11:c.1255C>T

ENST00000453960.7:c.1291C>T

ENST00000303391.10:c.1255C>T

ENST00000453960.6:c.1291C>T

ENST00000619732.4:c.1255C>T

ENST00000628176.2:c.*627C>T

NM_001110792.1:c.1291C>T

NM_001316337.1:c.976C>T

NM_004992.3:c.1255C>T

NM_001316337.2:c.976C>T

NM_001369391.2:c.976C>T

NM_001369392.2:c.976C>T

NM_001369393.2:c.976C>T

NM_001369394.1:c.976C>T

NM_001369394.2:c.976C>T

NM_001386137.1:c.586C>T

NM_001386138.1:c.586C>T

NM_001386139.1:c.586C>T

NM_004992.4:c.1255C>T

Benign

Met criteria codes **4**

BP5

BS2

BS1

PS4_Supporting

Evidence Links **0**

Expert Panel

[Rett and Angelman-like Disorders VCEP](#) [↗](#)

Criteria Specification Information **!**

[↗](#) **Criteria Specifications for this VCEP**

Rett and Angelman-like Disorders VCEP

The allele frequency of the p.Pro419Ser variant in MECP2 (NM_004992.3) is 0.02% in "Other" sub population in gnomAD, which is high enough to meet the BS1 criteria based on thresholds defined by the ClinGen Rett/Angelman-like Expert Panel for Rett/AS-like conditions (BS1) and additionally is present in three male individuals in gnomAD. The p.Pro419Ser variant is observed in at least 7 unaffected individuals (Baylor Genetic internal database, GeneDx internal database, PMID 16225173) (BS2). The p.Pro419Ser variant is found in a patient with an alternate molecular basis of disease (Invitae internal database) (BP5). The p.Pro419Ser variant has been observed in at least 2 individuals with neurodevelopmental disorders (PMID 32457807, 16225173) (PS4_supporting), however in these studies MECP2 was the only gene sequenced. In summary the p.Pro419Ser variant in MECP2 is classified as benign for Rett Syndrome based on the ACMG/AMP criteria (BS1, BS2, BP5) and the PS4_supporting evidence is not considered inconsistent with the final benign classification.

Met criteria codes

BP5			The Pro419Ser variant is found in a patient with an alternate molecular basis of disease (Invitae internal database).
BS2			The Pro419Ser variant is observed in at least 2 unaffected individuals (Baylor Genetic internal database, GeneDx internal database, PMID 16225173).
BS1			The allele frequency of the Pro419Ser variant in MECP2 is 0.02% in "Other" sub population in gnomAD, which is high enough to meet the BS1 criteria based on thresholds defined by the ClinGen Rett/Angelman-like Expert Panel for Rett/AS-like conditions and additionally is present in three male individuals in gnomAD.
PS4_Supporting			The Pro419Ser variant has been observed in at least 2 individuals with neurodevelopmental disorders (PMID 32457807, 16225173).

Curation History



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