

Variant: NM_000277.2(PAH):c.526C>T (p.Arg176Ter)

CA275338 [↗](#)

102723 (ClinVar) [↗](#)

Gene: PAH ([HGNC:5053](#))

Condition: phenylketonuria ([MONDO:0009861](#))

Inheritance Mode: Autosomal recessive inheritance

UUID: 08d51386-af9e-4de1-8e7b-0dc6c2252c91

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HGVS expressions

NM_000277.2:c.526C>T

NM_000277.2(PAH):c.526C>T (p.Arg176Ter)

NC_000012.12:g.102855316G>A

CM000674.2:g.102855316G>A

NC_000012.11:g.103249094G>A

CM000674.1:g.103249094G>A

NC_000012.10:g.101773224G>A

NG_008690.1:g.67287C>T

NG_008690.2:g.108095C>T

NM_000277.1:c.526C>T

NM_001354304.1:c.526C>T

NM_000277.3:c.526C>T

ENST00000307000.7:c.511C>T

ENST00000549111.5:n.622C>T

ENST00000551988.5:n.547C>T

ENST00000553106.5:c.526C>T

Pathogenic

Met criteria codes **4**

PM3_Strong

PM2

PVS1

PP4_Moderate

Evidence Links **2**

Expert Panel

Phenylketonuria VCEP [↗](#)

Criteria Specification Information **!**

[↗](#) Criteria Specifications for this VCEP

Evidence submitted by expert panel

Phenylketonuria VCEP

PAH-specific ACMG/AMP criteria applied: PVS1: Nonsense variant; PM2: ExAC MAF: 0.00010; PP4_Moderate: BH4 defect excluded in all patients in Liu 2015. Identified in 6 patients in this study (PMID:10394930; PMID:26600521); PM3_Strong: Identified in 6 patients, in trans with R243Q and R241C (both pathogenic) (PMID:26600521). In summary this variant meets criteria to be classified as pathogenic for phenylketonuria in an autosomal recessive manner based on the ACMG/AMP criteria applied as specified by the PAH Expert Panel: (PVS1, PM2, PP4_Moderate, PM3_Strong).

Met criteria codes

PM3_Strong			Identified in 6 patients, in trans with R243Q and R241C (both pathogenic)
			Identified in 6 patients, in trans with R243Q and R241C (both pathogenic) PubMed:26600521 
PM2			ExAC MAF: 0.00010
PVS1			Nonsense variant
PP4_Moderate			BH4 defect excluded in all patients in Liu 2015. Identified in 6 patients in this study Patients with PAH-deficient hyperphenylalaninaemia in 272 independent families (248 PKU and 24 MHP) living in Germany were investigated. R176X was detected on 1 chromosome. PubMed:10394930  BH4 defect excluded in all patients PubMed:26600521 

Curation History 











See Report 

Preferred Variant Title 

Classification 

Condition 

Published Date 

Version 

Criteria Specification 

Gene

No matching records found

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