

### Mutation sequence analysis

Contributed by : CHU Lyon

HGVS nomenclature (NM\_000295.4)

Nomenclature including the signal peptide

c.185A>G

Type of variation	Mutation Location	Genetic background	ACMG classification
AAT variant	Exon 2	M1 Ala	Likely pathogenic

### Comments

### AAT variant and Q0 alleles

Variant name	Also Known as	Pathogenicity	HGVS nomenclature protéine
O <sub>feyzin</sub>		Deficient	p.Tyr62Cys
3D position of aa affected	Mobility on polyacrylamide gel		Mobility on agarose gel
AATserum level (g/L)		Anti-elastolytic activity (IU/L)	
<b>Heterozygous</b>	<b>Homozygous</b>	<b>Heterozygous</b>	<b>Homozygous</b>
0.59			

### Comments

### Occurrence

Ethnic background without frequency range : Algerian

### Ethnic background and frequency

Frequency range		Group tested	
from (%)	To (%)	Size	Description (who was tested)

<b>Occurrence comments</b>			
First description in a boy with neo-natal icterus and originating from Algeria.			
<b>Overall comments</b>			
<b>Occurrence comments</b>			
This new AAT variant is also very likely pathogenic considering in silico analyses: - very conserved amino-acid in evolution (phyloP = 4.81) - important Grantham distance between Tyr and Cys: 194 [0-215] - SIFT: deleterious score (score: 0.01; median: 2.73) - Mutation Taster: disease causing (p-value = 0.999)			
<b>Last Update</b>			
First publication : 12-24-2019 11:14 Last update : 02-02-2020 20:28 by Pr Curateur test			