

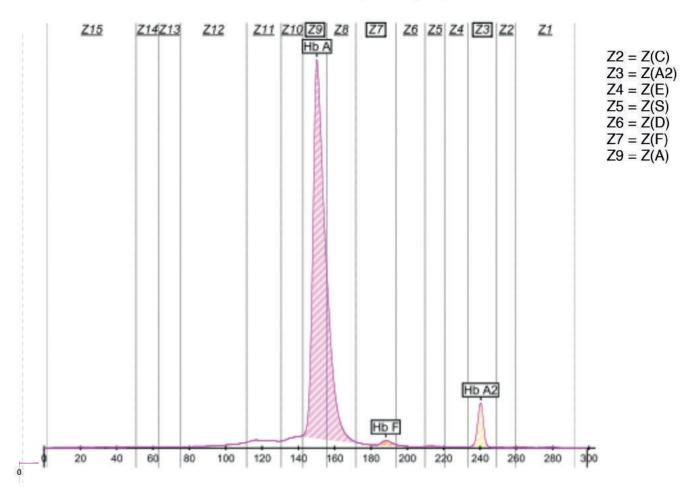
# **Beta-thalassemia**

#### with near normal Hb F

Globin chain(s) involved: **Beta** Status: **Heterozygous** 

Migration in zone(s): Z(A) (=Z9), Z(F) (=Z7) and Migration in position(s): 150 and 243

**Z(A2) (=Z3)** Peak position may vary +/- 1



#### Capillary Electrophoresis

Fractions	Value %
Hb A	93,8
Hb F	1,1
Hb A2	5,1

**Comments on this profile:** Hb A2 elevation is compatible with Beta-thalassemia trait. Hb F elevation is minimal, probably not associated with gamma gene polymorphism and erythropoietic stress.



## **Beta-thalassemia**

### with slightly elevated Hb F

Globin chain(s) involved: **Beta** Status: **Heterozygous** 

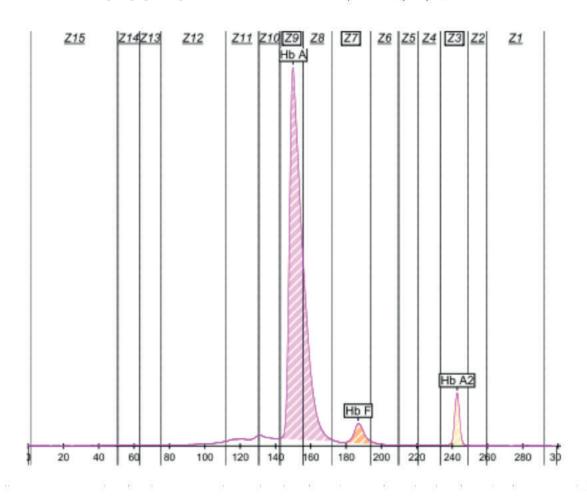
Migration in zone(s): Z(A) (=Z9), Z(F) (=Z7) and

Z(A2) (=Z3)

Migration in position(s): 150 and 243

Z2 = Z(C) Z3 = Z(A2) Z4 = Z(E) Z5 = Z(S) Z6 = Z(D) Z7 = Z(F)Z9 = Z(A)

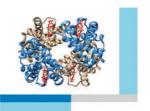
Peak position may vary +/- 1



## Capillary Electrophoresis

Fractions	Value %
Hb A	91,4
Hb F	3,8
Hb A2	4,8

Comments on this profile: Hb A2 elevation is compatible with Beta-thalassemia trait. Hb F elevation is probably associated with gamma gene polymorphism and erythropoietic stress.



# **Beta-thalassemia**

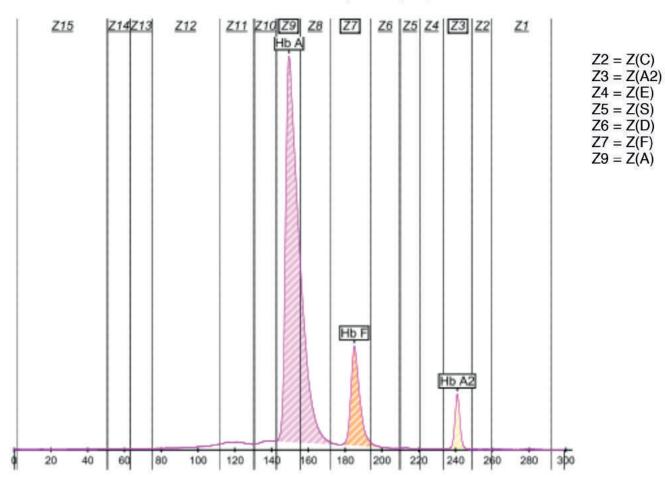
#### with variably elevated Hb F

Globin chain(s) involved: **Beta** Status: **Heterozygous** 

Migration in zone(s): Z(A) (=Z9), Z(F) (=Z7) and Z(A2) (=Z3)

Migration in position(s): 150 and 243

Peak position may vary +/- 1



### Capillary Electrophoresis

Fractions	Value %
Hb A	82,0
Hb F	13,7
Hb A2	4,3

**Comments on this profile:** Hb A2 elevation is compatible with Beta-thalassemia trait. Hb F elevation is probably associated with gamma gene polymorphism and erythropoietic stress.



# Beta-thalassemia with presence of elevated Hb F

#### Mutation data

Status:	Heterozygous
Beta-thalassemia	
Mutation	One of the many described Beta gene defects reported on http://globin.cse.psu.edu/hbvar/menu.html
Nomenclature	
In combination with:	
Mutation	
Nomenclature	

#### **Comments:**

## Hematology

Hematological parameters	Results
RBC	Normal or elevated
Hemoglobin	Low
Hematocrit	Low
MCV	Low

Hematological parameters	Results
MCH	Low
Blood smear	Thalassemic smear.
Serum iron and ferritin	Normal or elevated ferritin

Comments on hematology:	Microcytic, hypochromic, eventually elevated RBC counts.
3,	

#### Other information

Clinical context:	
Clinical presentation	Mild chronic anemia symptoms
Genetic risk	Severe risk in combination with Beta-thalassemia, Hb S, Hb E, Hb Lepore and other less common hemoglobin variants
Advice	Partner and family analysis
About this variant:	
Stability	
Oxygen affinity	
Found in	All ethnic groups from tropic and sub-tropic origin

#### **Comments:**

References: -