HOXA9 (homeobox A9)

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Identity

Other names: HOX1G (homeobox-1G)
Location: 7p15

Protein

Description
129 amino acids; DNA binding domain (homeobox) in C-term.

Localisation
Nuclear.

Function
Sequence specific transcription factor; role during embryonic development (patterning); HOX genes are also expressed in adult tissues, including blood cells; probable role in blood cell differentiation.

Homology
With class 1 homeodomain proteins.

Implicated in

\[ t(7;11)(p15;p15)/ANLL \rightarrow NUP98/HOXA9 \]

Disease
M2-M4 ANLL mostly; occasionally: CML-like cases.

Prognosis
Mean survival: 15 mths.

Cytogenetics
Sole anomaly most often.

Hybrid/Mutated Gene
5' NUP98 - 3' HOXA9.

Abnormal Protein
Fuses the GLFG repeat domains of NUP98 to the HOXA9 homeobox.

References


This article should be referenced as such: