t(14;17)(q32;q21) IGH/IGF2BP1

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Abstract

IGH rearrangements are a common chromosomal abnormality seen in lymphoproliferative disorders, including ALL. Numerous translocation partners of IGH gene have been identified. Here we report a B-ALL case with a t(14;17)(q32;q21) IGH/IGF2BP1.

Keywords
IGH partner, t(14;17)(q32;q21), IGF2BP1, acute B lymphoblastic leukemia

Disease
B-cell acute lymphoblastic leukemia (ALL)

Phenotype/cell stem origin
CD10+, CD19+, CD38+, cytoplasmic CD22+ ALL

Epidemiology
Only one case, a 16 year old boy (Gu et al., 2014)

Clinics
Severe pancytopenia and an elevated lactate dehydrogenase (1048U/L); WBC was 2.7 X 10^9 with 20% blasts; no central nervous system involvement.

Cytogenetics

Cytogenetics morphological
An additional copy of the derivative 14 was found

Genes involved and proteins

IGH
Location
14q32

IGF2BP1
Protein
IGF2BP1 is a member of Insulin-like growth factor 2 mRNA-binding protein family; pro-oncogenic RNA-binding; post-transcriptional regulation of gene expression (Bell et al., 2013; Lederer et al., 2014).

Result of the chromosomal anomaly

Hybrid gene
Description
likely head-to-head fusion of IGF2BP1 with the IGH locus.
**Fusion protein**

**Oncogenesis**
Overexpression of the IGF2BP1 gene.

**References**


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This article should be referenced as such: