t(3;16)(q27;p11)
Jean-Loup Huret

Genetics, Dept Medical Information, UMR 8125 CNRS, University of Poitiers, CHU Poitiers Hospital, F-86021 Poitiers, France

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Identity

![G-band image]

Clinics and pathology

**Disease**
Diffuse large cell lymphoma.

**Epidemiology**
Only one case to date, a 64 year old male patient.

**Evolution**
Complete remission was obtained.

Cytogenetics

**Cytogenetics, morphological**
Sole anomaly within the subclone

**Genes involved and Proteins**

**BCL6**
Location: 3q27

**DNA / RNA**
Spans on 25 kb; 11 exons.

**Protein**
Sequence-specific DNA binding transcriptional repressor.

**IL21R (or IL21R-alpha)**
Location: 16p11

**DNA / RNA**
Spans on 48 kb; 10 exons.

**Protein**
IL21R is, in fact, an heterodimer made of IL21R-alpha, and the common gamma chain (CD132); IL21Ra is the private receptor of IL21; IL21/IL21R, selectively expressed in lymphoid cells, activates the JAK/STAT transcription signaling pathway; IL21/IL21R plays a role in proliferation, differentiation of T cells, B cells, natural killers (NK) cells, and dendritic cells.; promotes and inhibit immune responses.
Results of the chromosomal anomaly

Hybrid gene

Description
The IL21R promoter region replaces the regulatory sequences of BCL6; the chimeric mRNA consists of the 2 non coding exons 1a/1b of IL21R and the coding exons of BCL6.

Fusion protein

Oncogenesis
Enhanced expression of BCL6.

References


This article should be referenced as such: