t(X;21)(p11;q22)

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Published in Atlas Database: August 2008

Online updated version : http://AtlasGeneticsOncology.org/Anomalies/t0X21p11q22ID1523.html

DOI: 10.4267/2042/44542

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Identity

Probe used: AML1/ETO to investigate the presence of a RUNX1T1-RUNX1 fusion.

t(X;21)(p11.2;q22) G- banding and FISH - Courtesy Aurelia M. Meloni-Ehrig
**Clinics and pathology**

**Disease**
Chronic myelogenous leukemia (CML) in blast crisis; the t(X;21) may be therapy related.

**Epidemiology**
Only one case to date, a female patient aged 23 years (Jeandidier et al., 2006).

**Cytogenetics**

**Additional anomalies**
t(9;22)(q34;q11), +8, i(17q).

**Genes involved and proteins**

**Note**
The partner of RUNX1 is unknown.

**RUNX1**

**Location**
21q22

**Protein**
Contains a Runt domain and, in the C-term, a transactivation domain; forms heterodimers; widely expressed; nuclear localisation; transcription factor (activator) for various hematopoietic-specific genes.

**References**

This article should be referenced as such: