

t(11;18)(q21;q21)

Clinics and Pathology

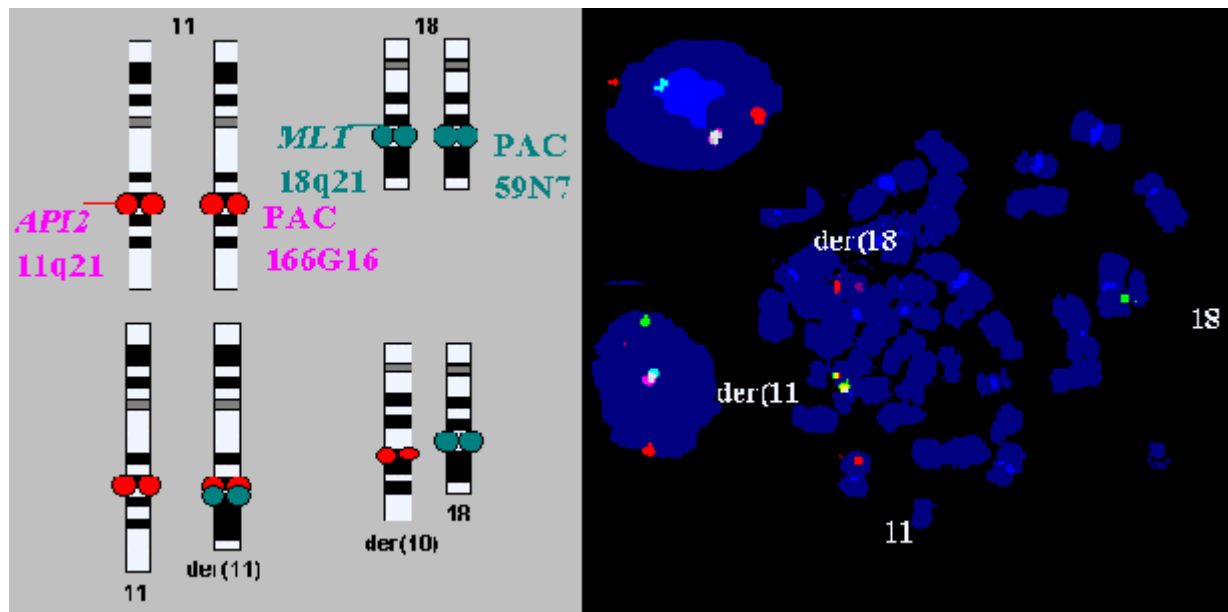
Disease [B-cell non Hodgkin lymphoma](#) (NHL), [marginal zone B-cell lymphoma](#) of Mucosa-Associated Lymphoid Tissue () -type NOTE

Phenotype /
cell stem
origin Marginal zone B-cells

Epidemiology found in extranodal MZBCL or MALT-type (50 %), absent in splenic and nodal MZBCL

Prognosis For gastric MALT-type lymphomas, t(11;18) is a clonal marker for resistance to *Helicobacter pylori* eradication therapy and antigen independent growth

Cytogenetics



t(11;18) FISH - Baens Mathijs, Peter Marynen

Genes involved and Proteins

Gene Name [BIRC3](#)

Location 11q21

Protein 68 kDa; 604 amino acids. Member of the 'inhibitor of apoptosis' (IAP) protein family.

Gene Name [MALT1](#)

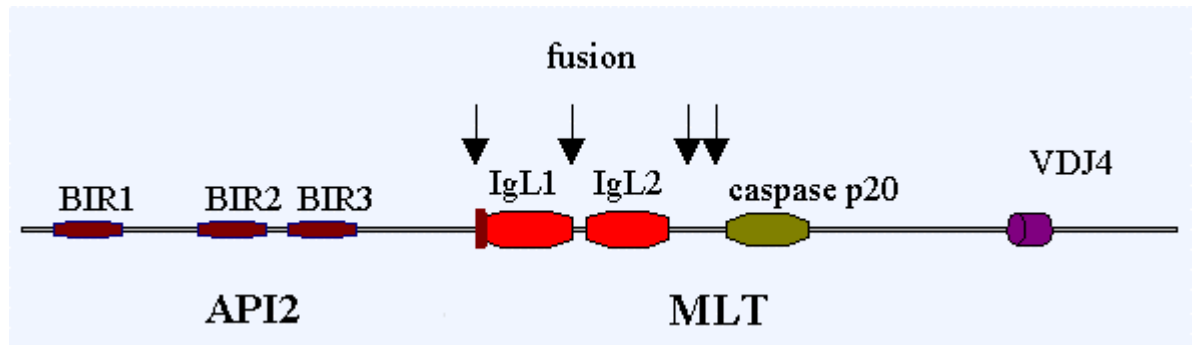
Location 18q21

Protein 92 kDa; 824 amino acids

Result of the chromosomal anomaly

Hybrid gene 5' API2 on chromosome 11q21 translocated on chromosome 18 in frame with 3' MALT1. Deletions often exclude the expression of the reciprocal 5' MALT API2 3' transcript.

Fusion Protein



BIRC3/MALT1 fusion protein - Baens Mathijs, Peter Marynen

Description N- term API2-MLT C-term fusion protein; All MALT-type lymphomas reported with a t(11;18) express an 'in frame' API2-MLT fusion protein with consistently the three BIR domains of API2 fused to the caspase p20 domain and VDJ4-like domain of MLT.

External links

Other database [t\(11;18\)\(q21;q21\)](#) [Mitelman database \(CGAP - NCBI\)](#)

Other database [t\(11;18\)\(q21;q21\)](#) [CancerChromosomes \(NCBI\)](#)

Bibliography

A novel gene, MALT1 at 18q21, is involved in t(11;18) (q21;q21) found in low-grade B-cell lymphoma of mucosa-associated lymphoid tissue.

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Medline [10523859](#)

The apoptosis inhibitor gene API2 and a novel 18q gene, MLT, are recurrently

rearranged in the t(11;18)(q21;q21) associated with mucosa-associated lymphoid tissue lymphomas.

Dierlamm J, Baens M, Wlodarska I, Stefanova OM, Hernandez JM, Hossfeld DK, De Wolf-Peeters C, Hagemeijer A, Van den Berghe H, Marynen P.

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The product of the t(11;18), an API2-MLT Fusion, marks nearly half of gastric MALT type lymphomas without large cell proliferation.

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The product of the t(11;18), an API2-MLT fusion, is an almost exclusive finding in marginal zone cell lymphoma of extranodal MALT-type.

Maes B, Baens M, Marynen P, Wolf-Peeters C.

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Detection of t(11;18)(q21;q21) by interphase fluorescence in situ hybridization using API2 MLT specific probes.

Dierlamm J, Baens M, Stefanova-Ouzounova M, Hinz K, Wlodarska I, Maes B, Steyls A, Driessen A, Verhoef G, Gaulard P, Hagemeijer A, Hossfeld DK, Wolf-Peeters C, Marynen P.

Blood 2000; 96: 2215-2218.

Medline [10979968](#)

Structure of the MLT gene and molecular characterisation of the genomic breakpoint junctions in the t(11;18)(q21;q21) of marginal zone B-cell lymphomas of MALT-type.

Baens M., Steyls A., Dierlamm J., De Wolf-Peeters C., Marynen P.

Genes Chromosom Cancer 2000; 29: 281-291.

Medline [11066071](#)

Contributor(s)

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URL : <http://www.infobiogen.fr/services/chromcancer/Anomalies/t1118ID2022.html>

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