**RHOH (ras homolog gene family, member H)**

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Published in Atlas Database: February 1998

Online version is available at: http://AtlasGeneticsOncology.org/Genes/RHOH93.html

DOI: 10.4267/2042/32100

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**Identity**

Other names: TTF (translocation three four); ARHH
Location: 4p13

**DNA/RNA**

Description
Spans on a 35 kb genomic fragment; two exons separated by a large intron; small GTPase encoding gene.

Transcription
2.2 kb mRNA; coding sequence: 575 bp, located in the second exon.

**Protein**

Description
191 amino acids; 21 kDa; contains a GTP binding motif, a GTPase activity site, and a membrane localisation signal (CAAX box) in the very C-term.

Expression
Restricted to the hemopoietic tissues.

**Localisation**
Plasmic membrane.

**Function**
Small GTPase of the Rho subfamily; involved in signal transduction and cytoskeletal reorganization.

**Homology**
With all GTPases of the Ras superfamily.

**Implicated in**

\[ t(3;4)(q27;p13)/\text{NHL} \rightarrow BCL6/RHOH \]

**Disease**
Follicular NHL.

**Cytogenetics**
Observed as a secondary anomaly.

Hybrid/Mutated Gene
5' RHOH - 3' BCL6 and 5' BCL6 - 3' RHOH, are leading to two fusion transcripts.

**Abnormal Protein**
No fusion protein, but promoter exchange between both partner genes.

\[ t(4;14)(p13;q32)/\text{multiple myeloma} \rightarrow RHOH/? \]

**Disease**
Multiple myeloma.

**Prognosis**
Still unknown: only 1 available case.

**Cytogenetics**
Observed as a unique anomaly.

**Hybrid/Mutated Gene**
Not yet known (under study).

**Abnormal Protein**
No fusion protein.
References


This article should be referenced as such: