

## Gene Section

### Short Communication

# RBM15 (RNA binding motif protein 15)

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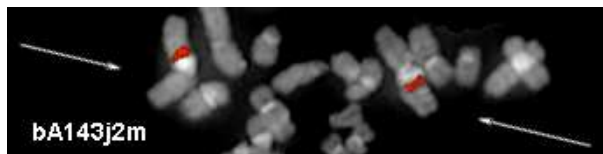
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## Identity

**Other names:** OTT (one twenty-two)

**HGNC (Hugo):** RBM15

**Location:** 1p13



Probe(s) - Courtesy Mariano Rocchi, Resources for Molecular Cytogenetics

## DNA/RNA

### Description

One exon.

### Transcription

Alternate splicing; a 8.2 kb single exon transcript and a 3.9 kb transcript.

## Protein

### Description

957 amino acids; contains 3 RNA recognition motif (RMM) consensus in NH2 term and up to amino acid 528, and a SPOC (Spen Paralog and Ortholog) domain in COOH-term.

### Expression

Wide.

### Homology

With the *Drosophila* split-end (spen).

## Implicated in

***t(1;22)(p13;q13) / acute megakaryocytic leukaemia (M7 ANLL) --> OTT - MAL***

### Disease

Acute megakaryocytic leukaemia found in infants.

### Prognosis

Complete remission in only 50% of cases; median survival: 8 months.

### Cytogenetics

60% of cases have the t(1;22) as a single anomaly; the remaining cases exhibit complex and hyperploid clones.

### Hybrid/Mutated gene

5' OTT - 3' MAL, comprising most of OTT fused to most of MAL; the reciprocal 5' MAL - 3' OTT may or may not be present.

### Abnormal protein

Includes most of OTT with the RNA recognition motifs and the SPOC domain in N-term, and most of MAL, with the scaffold attachment factor box in C-term.

### Oncogenesis

May play a role in chromatin organization, HOX differentiation pathways, or extracellular signalling.

## References

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