

Gene Section

Short Communication

MSF (MLL septin-like fusion)

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Identity

Other names: MSF1; AF17q25 (ALL1 fused gene from chromosome 17q25); KIAA0991

HGNC (Hugo): MSF

Location: 17q25

DNA/RNA

Transcription

Various transcripts: 4.0 kb and 1.7 kb in most tissues, 3.0 kb; cDNA: 2801 bp.

Protein

Description

Various sized proteins have been described: 422, 568 amino acids (64 kDa), 574, 586, and 594 amino acids.

Expression

Wide.

Localisation

Cytoplasm.

Homology

Septin family: hCDCRe1-1 (human), also found involved in fusion protein with MLL in leukemia, H5 and NEDD5 (mouse), CDC10 (yeast), Pnut, Sep 1, and Sep 2 (drosophila).

Implicated in

t(11;17)(q23;q25) acute non lymphocytic leukemia (ANLL) --> MLL/MSF

Disease

De novo and treatment related leukemia.

Prognosis

Likely to be poor.

Hybrid/Mutated gene

5' MLL - 3' MSF; fusion at MLL exon 5; the reciprocal MSF-MLL is also transcribed, but out of frame.

Abnormal protein

NH2 - AT hook and DNA methyltransferase from MLL fused to most of MSF in COOH.

References

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