

## MECT1 (mucoepidermoid carcinoma translocated 1)

### Identity

Other names **KIAA0616**  
 Hugo **MECT1**  
 Location 19p13

### DNA/RNA

Description spans 99 kb; contains at least 14 exons

### Protein

Localisation predicted nuclear localization.

Function unknown

### Implicated in

**Entity** mucoepidermoid carcinoma with t(11;19)(q21-22;p13). .  
**Disease** Most common type of malignant salivary gland tumor; second most frequent lung tumor of bronchial gland origin.  
**Hybrid/Mutated Gene** MECT1- [MAML2](#); exon 1 of MECT1 fused to exons 2-5 of MAML2.  
**Abnormal Protein** MECT1-MAML2; in the fusion protein the first 171 aa including the basic domain of MAML2 are replaced by 42 aa of MECT1; there are no sequence similarities in the N-terminal domains of MAML2 and MECT1; the fusion protein activates transcription of the Notch target gene HES1 independently of both Notch ligand and CSL.

### External links

	<b>Nomenclature</b>
<a href="#">Hugo</a>	<a href="#">MECT1</a>
<a href="#">GDB</a>	<a href="#">MECT1</a>
<a href="#">Entrez Gene</a>	<a href="#">MECT1 23373</a> mucoepidermoid carcinoma translocated 1
	<b>Cards</b>
<a href="#">GeneCards</a>	<a href="#">MECT1</a>
<a href="#">Ensembl</a>	<a href="#">MECT1</a>
<a href="#">CancerGene</a>	<a href="#">MECT1</a>
<a href="#">Genatlas</a>	<a href="#">MECT1</a>
<a href="#">GeneLynx</a>	<a href="#">MECT1</a>
<a href="#">eGenome</a>	<a href="#">MECT1</a>
<a href="#">euGene</a>	<a href="#">23373</a>
	<b>Genomic and cartography</b>
<a href="#">GoldenPath</a>	<a href="#">MECT1 - 19p13</a> <a href="#">chr19:18655504-18749757 + 19p13.11</a> (hg17-May_2004)
<a href="#">Ensembl</a>	<a href="#">MECT1 - 19p13.11 [CytoView]</a>
<a href="#">NCBI</a>	<a href="#">Genes Cyto</a> <a href="#">Gene Seq</a> <small>[Map View - NCBI]</small>
<a href="#">OMIM</a>	<a href="#">Disease map [OMIM]</a>
<a href="#">HomoloGene</a>	<a href="#">MECT1</a>
	<b>Gene and transcription</b>
<a href="#">Genbank</a>	<a href="#">AC006123</a> <small>[SRS]</small> <a href="#">AC006123</a> <small>[ENTREZ]</small>

[Genbank](#) [AB014516](#) [SRS] [AB014516](#) [ENTREZ]  
[Genbank](#) [AK024089](#) [SRS] [AK024089](#) [ENTREZ]  
[Genbank](#) [AY040323](#) [SRS] [AY040323](#) [ENTREZ]  
[Genbank](#) [AY360171](#) [SRS] [AY360171](#) [ENTREZ]  
[RefSeq](#) [NM\\_015321](#) [SRS] [NM\\_015321](#) [ENTREZ]  
[RefSeq](#) [NM\\_025021](#) [SRS] [NM\\_025021](#) [ENTREZ]  
[RefSeq](#) [NT\\_086897](#) [SRS] [NT\\_086897](#) [ENTREZ]  
[AceView](#) [MECT1](#) AceView - NCBI  
[TRASER](#) [MECT1](#) Traser - Stanford  
[Unigene](#) [Hs.371096](#) [SRS] [Hs.371096](#) [NCBI] [HS371096](#) [spliceNest]

### Protein : pattern, domain, 3D structure

[SwissProt](#) [O75114](#) [SRS] [O75114](#) [EXPASY] [O75114](#) [INTERPRO]  
[CluSTr](#) [O75114](#)  
[Blocks](#) [O75114](#)

### Polymorphism : SNP, mutations, diseases

[OMIM](#) [607536](#) [[map](#)]  
[GENECLINICS](#) [607536](#)  
[SNP](#) [MECT1](#) [dbSNP-NCBI]  
[SNP](#) [NM\\_015321](#) [SNP-NCI]  
[SNP](#) [NM\\_025021](#) [SNP-NCI]  
[SNP](#) [MECT1](#) [GeneSNPs - Utah] [MECT1](#) [SNP - CSHL] [MECT1](#) [HGBASE - SRS]

### General knowledge

[Family Browser](#) [MECT1](#) [UCSC Family Browser]  
[SOURCE](#) [NM\\_015321](#)  
[SOURCE](#) [NM\\_025021](#)  
[SMD](#) [Hs.371096](#)  
[SAGE](#) [Hs.371096](#)  
[PubGene](#) [MECT1](#)

### Other databases

#### Probes

[Probe](#) [MECT1](#) Related clones (RZPD - Berlin)

#### PubMed

[PubMed](#) [6 Pubmed reference\(s\) in LocusLink](#)

### Bibliography

**Identification of new human mastermind proteins defines a family that consists of positive regulators for notch signaling.**

Lin SE, Oyama T, Nagase T, Harigaya K, Kitagawa M.  
 J Biol Chem 2002; 277: 50612-50620.  
 Medline [12386158](#)

**Identification of a family of mastermind-like transcriptional coactivators for mammalian notch receptors.**

Wu L, Sun T, Kobayashi K, Gao P, Griffin JD.  
 Mol Cell Biol 2002; 22:7688-7700.  
 Medline [12370315](#)

**t(11;19)(q21;p13) translocation in mucoepidermoid carcinoma creates a novel fusion product that disrupts a Notch signaling pathway.**

Tonon G, Modi S, Wu L, Kubo A, Coxon AB, Komiya T, O'Neil K, Stover K, El-Naggar A, Griffin JD, Kirsch IR, Kaye FJ.

Nat Genet 2003; 33: 208-213.

Medline [12539049](#)

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**Citation**

*This paper should be referenced as such :*

**Stenman G** . MECT1 (mucoepidermoid carcinoma translocated 1). Atlas Genet Cytogenet Oncol Haematol. July 2003 .

URL : <http://www.infobiogen.fr/services/chromcancer/Genes/MECT1ID471.html>

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