

STARD3 (START domain containing 3)

Identity

Other names	MLN64
	CAB1
Hugo	MLN64
Location	17q12-21 from centromere to telomere are: TRAF4 (alias MLN62/CART1), Lasp1 (alias MLN50), c-erbB2 , and MLN64

DNA/RNA

Transcription cDNA: 2.1 kb; coding sequence: 1335 bp

Protein

Description	445 amino acids; 50 kDa; contains four putative transmembrane domains at its N-terminal part; possesses a StAR Homology Domain at its C-terminal part
Homology	with StAR (Steroidogenic Acute Regulatory protein)

Implicated in

Entity	breast carcinomas
Disease	17q11-q21 amplification is found in about 25% of primary breast carcinomas
Prognosis	poor clinical outcome; increase risk of relapse

External links

	Nomenclature
Hugo	MLN64
GDB	STARD3
Entrez_Gene	STARD3_10948 START domain containing 3
	Cards
Atlas	MLN64ID202
GeneCards	STARD3
Ensembl	STARD3
Genatlas	STARD3

GeneLynx	STARD3
eGenome	STARD3
euGene	10948
Genomic and cartography	
GoldenPath	STARD3 - chr17:35046938-35073248 + 17q12 (hg18-Mar_2006)
Ensembl	STARD3 - 17q12 [CytoView]
NCBI	Genes Cyto Gene Seq [Map View - NCBI]
OMIM	Disease map [OMIM]
HomoloGene	STARD3
Gene and transcription	
Genbank	AB209772 [ENTREZ]
Genbank	AL831952 [ENTREZ]
Genbank	BC008356 [ENTREZ]
Genbank	BC008747 [ENTREZ]
Genbank	BC019286 [ENTREZ]
RefSeq	NM_006804 [SRS] NM_006804 [ENTREZ]
AceView	STARD3 AceView - NCBI
TRASER	STARD3 Traser - Stanford
Unigene	Hs.77628 [SRS] Hs.77628 [NCBI] HS77628 [spliceNest]
Protein : pattern, domain, 3D structure	
SwissProt	Q14849 [SRS] Q14849 [EXPASY] Q14849 [INTERPRO]
Prosite	PS50848 START [SRS] PS50848 START [Expasy]
Interpro	IPR000799 StAR [SRS] IPR000799 StAR [EBI]
Interpro	IPR002913 START_lipid_bd [SRS] IPR002913 START_lipid_bd [EBI]
CluSTr	Q14849
Pfam	PF01852 START [SRS] PF01852 START [Sanger] pfam01852 [NCBI-CDD]
Smart	SM00234 START [EMBL]
Blocks	Q14849
PDB	1EM2 [SRS] 1EM2 [PdbSum], 1EM2 [IMB]
Protein Interaction databases	
DIP	Q14849
IntAct	Q14849
Polymorphism : SNP, mutations, diseases	
OMIM	607048 [map]
GENECLINICS	607048
SNP	STARD3 [dbSNP-NCBI]
SNP	NM_006804 [SNP-NCI]

[SNP](#) [STARD3](#) [GeneSNPs - Utah] [STARD3](#) [HGBASE - SRS] [STARD3](#) [SNP - HAPMAP]

General knowledge

[Family Browser](#)

[STARD3](#) [UCSC Family Browser]

[SOURCE](#)

[NM_006804](#)

[SMD](#)

[Hs.77628](#)

[SAGE](#)

[Hs.77628](#)

[Amigo](#)

[cytoplasm](#)

[Amigo](#)

[lipid metabolism](#)

[Amigo](#)

[steroid biosynthesis](#)

[Amigo](#)

[C21-steroid hormone biosynthesis](#)

[Amigo](#)

[mitochondrial transport](#)

[Amigo](#)

[lipid transport](#)

[Amigo](#)

[cholesterol metabolism](#)

[Amigo](#)

[lipid binding](#)

[Amigo](#)

[cholesterol binding](#)

[Amigo](#)

[cholesterol binding](#)

[Amigo](#)

[membrane](#)

[Amigo](#)

[integral to membrane](#)

[Amigo](#)

[cholesterol transporter activity](#)

[PubGene](#)

[STARD3](#)

Other databases

Probes

[Probe](#)

[MLN64 Related clones \(RZPD - Berlin\)](#)

PubMed

[PubMed](#)

[17 Pubmed reference\(s\) in LocusLink](#)

Bibliography

Identification of four novel human genes amplified and overexpressed in breast carcinoma and localized to q11-q21.3 region of chromosome 17.

Tomasetto C, Régnier C, Moog-Lutz C, Mattei G, Chenard MP, Lidereau R, Basset P, Rio MC.

Genomics 1995; 28: 367-376.

Medline [7490069](#)

Two distinct amplified regions at 17q11-q21 involved in human primary breast cancer.

Bièche I, Tomasetto C, Régnier C, Moog-Lutz C, Rio MC, Lidereau R.

Cancer Res 1996; 56: 3886-3890.

Medline [8752152](#)

Isolation of a candidate gene, CAB1, for cholesterol transport to mitochondria from the c-ERBB-2 amplicon by a modified cDNA selection method.

Akiyama N, Sasaki H, Ishizuka T, Kishi T, Sakamoto H, Onda M, Hirai H, Yazaki Y, Sugimura T, Terada M.

Cancer Res 1997; 57: 3548-3553.

Medline [9270027](#)

MLN64 exhibits homology with the steroidogenic acute regulatory protein (StAR) and is over-expressed in human breast carcinomas.

Moog-Lutz C, Tomasetto C, Régnier C, Wendling C, Lutz Y, Muller D, Chenard MP, Basset P, Rio MC

Int J Cancer 1997; 71: 183- 191.

Medline [9139840](#)

MLN64 contains a domain with homology to the steroidogenic acute regulatory protein (StAR) that stimulates steroidogenesis.

Watari H, Arakane F, Moog-Lutz C, Kallen CB, Tomasetto C, Gerton GL, Rio MC, Baker ME, Strauss III JF.

Proc Natl Acad Sci USA 1997; 94: 8462-8467.

Medline [9237999](#)

[REVIEW articles](#) *automatic search in PubMed*

[Last year publications](#) *automatic search in PubMed*

[BiblioGene - INIST](#)

Contributor(s)

Written	03-2000	Marie-Christine Rio
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Citation

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URL : <http://AtlasGeneticsOncology.org/Genes/MLN64ID202.html>

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