LAMC2(Texas Red)/CEN1q(FITC) FISH Probe

Catalog # FA0499 Size 200 uL

Specification

Product Description	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. (Technology).
Origin	Human
Source	Genomic DNA
Reactivity	Human
Notice	We **strongly recommend** the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)
Supplied Product	DAPI Counterstain (1500 ng/mL) 250 uL
Storage Instruction	Store at 4°C in the dark.

Applications

- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

Gene Info — LAMC2

Entrez GeneID	3918
Gene Name	LAMC2
Gene Alias	B2T, BM600, CSF, EBR2, EBR2A, LAMB2T, LAMNB2, MGC138491, MGC141938
Gene Description	laminin, gamma 2

Omim ID	150292 226650 226700
Gene Ontology	Hyperlink
Gene Summary	Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes inc luding cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Lamin ins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain prot ein encoded by a distinct gene. Several isoforms of each chain have been described. Different al pha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isofor ms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gam ma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the gamma chain i soform laminin, gamma 2. The gamma 2 chain, formerly thought to be a truncated version of beta chain (B2t), is highly homologous to the gamma 1 chain; however, it lacks domain VI, and domain s V, IV and III are shorter. It is expressed in several fetal tissues but differently from gamma 1, and is specifically localized to epithelial cells in skin, lung and kidney. The gamma 2 chain together wit h alpha 3 and beta 3 chains constitute laminin 5 (earlier known as kalinin), which is an integral par t of the anchoring filaments that connect epithelial cells to the underlying basement membrane. Th e epithelium-specific expression of the gamma 2 chain implied its role as an epithelium attachme nt molecule, and mutations in this gene have been associated with junctional epidermolysis bullos a, a skin disease characterized by blisters due to disruption of the epidermal-dermal junction. Tw o transcript variants resulting from alternative splicing of the 3' terminal exon, and encoding differe nt isoforms of gamma 2 chain, have been described. The two variants are differentially expressed in embryonic tissues, however, the biological significance of the two forms is not known. Transcrip t variants utilizing alternative polyA_signal have also been noted in literature. [provided by RefSeq
Other Designations	BM600-100kDa|OTTHUMP00000033550|cell-scattering factor (140kDa)|epiligrin|kalinin (105kD) |kalinin-105kDa|ladsin (140kDa)|laminin, gamma 2 (nicein (100kD), kalinin (105kD), BM600 (100 kD), Herlitz junctional epidermolysis bullosa))|nicein (100kDa)|nicein-10

Pathway

- ECM-receptor interaction
- Focal adhesion
- Pathways in cancer
- Small cell lung cancer

Disease

- Macular Degeneration