



Mouse Anti-Human LAYN monoclonal antibody, clone NN18 (CABT-ZB509)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	It reacts with Human LAYN
Target	LAYN
Immunogen	Recombinant Human Layilin/LAYN Protein
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	NN18
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA(cap) We recommend the following for sandwich ELISA (Capture - Detection): CABT-ZB509 - CABT-ZB880 This antibody will detect LAYN in antibody pair set. [ABPR-ZB085]
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human Layilin / LAYN. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	Purified, Liquid
Concentration	Lot specific

Size	50 µL, 100 µL, 200 µL, 1 mL
Buffer	PBS
Preservative	None
Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction	Layilin recently characterized as a 55 kDa transmembrane protein with homology to C-type lectins, is present in numerous cell lines and tissue extracts. As one of the adaptor proteins, talin mediates the interactions between the actin filaments and the cell membrane by binding to integral membrane proteins and the cytoskeleton. Layilin is a newly identified membrane-binding site for talin in peripheral ruffles of spreading cells, a ten-amino acid motif in the Layilin cytoplasmic domain is sufficient for talin binding, and its adjacent LH2-LH3 tandem arrays in the cytoplasmic domain provide docking sites for talin. Furthermore, talin binds Layilin, PIPK1gamma, and integrins in similar although subtly different ways. Layilin binds specifically to hyaluronan (HA) through its extracellular domain, a ubiquitous extracellular matrix component in most animal tissues and body fluids, but not to other tested glycosaminoglycans. The research suggests that Layilin may mediate signals from the extracellular matrix to the cell cytoskeleton via interaction with different intracellular binding partners and thereby be involved in the modulation of cortical structures in the cell. All the above actions reveal an interesting parallel between Layilin and the known HA receptor CD44. Also, merlin and radixin have been identified as different intracellular binding partners of Layilin. Accordingly, it has been suggested that Layilin plays roles in a variety of cellular processes, including cell shape, adhesion, motility, and homeostasis, as well as signal transduction. Besides, Layilin might play an important role in the process of invasion and lymphatic metastasis of lung carcinoma.
Keywords	LAYN; layilin

GENE INFORMATION

Synonyms	LAYN; layilin
Entrez Gene ID	143903
UniProt ID	Q6UX15