

ARG83364
LC3B ELISA KitPackage: 96 wells
Store at: 4°C, -20°C, -80°C

Summary

Product Description	ARG83364 LC3B ELISA Kit is an Enzyme Immunoassay kit for the quantification of LC3B in cell lysate
Tested Reactivity	All
Tested Application	ELISA
Target Name	LC3B
Conjugation	HRP
Conjugation Note	Read at 450 nm
Sensitivity	0.8 ng/ml
Sample Type	Cell lysate
Standard Range	1.25 - 20 ng/mL
Alternate Names	Microtubule-associated proteins 1A/1B light chain 3B; MAP1A/MAP1B light chain 3 B; MAP1A/1BLC3; MAP1 light chain 3-like protein 2; Autophagy-related protein LC3 B; MAP1A/MAP1B LC3 B; LC3B; MAP1LC3B-a; ATG8F; Microtubule-associated protein 1 light chain 3 beta; Autophagy-related ubiquitin-like modifier LC3 B

Application Instructions

Assay Time	1 hour; 5.5 hours
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Properties

Form	96 well
Storage instruction	Store components at 4°C, -20°C and -80°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

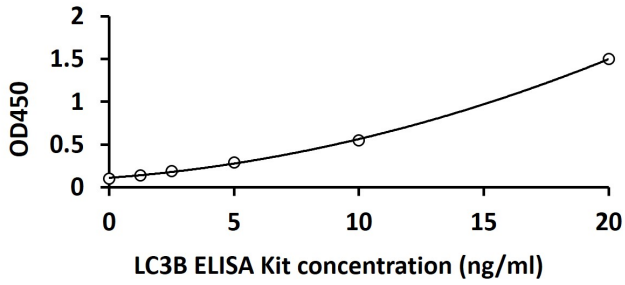
Background	LC3B is a subunit of neuronal microtubule-associated MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. Studies on the rat homolog implicate a role for this gene in autophagy, a process that involves the bulk degradation of cytoplasmic component. [provided by RefSeq, Jul 2008]
Function	LC3B is an Ubiquitin-like modifier involved in formation of autophagosomal vacuoles (autophagosomes). Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation. Promotes primary ciliogenesis by removing OFD1 from centriolar satellites via the autophagic pathway. Through its interaction with the reticulophagy receptor TEX264, participates in the remodeling of subdomains of the endoplasmic reticulum into autophagosomes upon nutrient stress,

which then fuse with lysosomes for endoplasmic reticulum turnover (PubMed:31006538, PubMed:31006537). [UniProt]

PTM

The precursor molecule is cleaved by ATG4B to form the cytosolic form, LC3-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, LC3-II

Images



ARG83364 LC3B ELISA Kit standard curve image

ARG83364 LC3B ELISA Kit results of a typical standard run with optical density reading at 450 nm.