

Product datasheet

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ARG83364 Package: 96 wells

Store at: 4°C, -20°C, -80°C

Summary

LC3B ELISA Kit

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

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

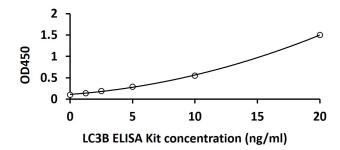
(autophagosomes). Plays a role in mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Whereas LC3s are involved in elongation of the phagophore membrane, 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, paticipates 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.