



# Mouse Anti-Rat LIFR monoclonal antibody, clone NN15 (CABT-ZB764)

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

## PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Rat LIFR
<b>Target</b>	LIFR
<b>Immunogen</b>	Recombinant Rat LIFR/CD118 Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Rat
<b>Clone</b>	NN15
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) This antibody will detect LIFR in antibody pair set. [ABPR-ZB344]
<b>Preparation</b>	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 Rat LIFR / CD118. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	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** LIFR (leukemia inhibitory factor receptor) belongs to the family of cytokine receptors. LIFR forms a high-affinity receptor complex with gp130, which mediates the activity of LIF (leukemia inhibitory factor) and thus affects the differentiation, proliferation, and survival of a wide variety of cells in the adult and the embryo. Besides LIF, LIFR can also bind to and activate CNTF (ciliary neurotrophic factor) and CLC (Cardiotrophin Like Cytokine). Evidence showed that in the retina, LIFR activating LIF, CT-1, and Cardiotrophin Like Cytokine (CLC) are strongly upregulated in response to preconditioning with bright cyclic light leading to robust activation of signal transducer and activator of transcription-3 (STAT3) in a time-dependent manner. Further, blocking LIFR activation during preconditioning using a LIFR antagonist (LIF05) attenuated the induced STAT3 activation and also resulted in reduced preconditioning-induced protection of the retinal photoreceptors. These data demonstrate that LIFR and its ligands play an essential role in endogenous neuroprotective mechanisms triggered by preconditioning-induced stress. LIFR was newly found to be a suppressor of hepatocellular carcinoma (HCC), one of the world's top five causes of cancer-related deaths.

**Keywords** LIFR; leukemia inhibitory factor receptor; LIF-R; LIF receptor

## GENE INFORMATION

**Synonyms** LIFR; leukemia inhibitory factor receptor; LIF-R; LIF receptor; D-factor/LIF receptor; leukemia inhibitory factor receptor alpha chain; soluble differentiation-stimulating factor receptor; LIF; AW061234; A230075M04Rik

**Entrez Gene ID** [81680](#)

**UniProt ID** [Q70535](#)