abcam

**ab202847**

# Anti-LIFR antibody

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Storage buffer** | pH: 7.4 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 48.98% TBS, 1X, 1% BSA |
| **Form** | Liquid |
| **Clonality** | Polyclonal |
| **Immunogen** | Synthetic Peptide within Rat Lifr aa 500-550 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link O70535 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/100 |
| **Notes** | - |

## IHC-P

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/100 - 1/500 |
| **Notes** | - |

## Target data

See full target information LIFR

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|---|---|
| **Function** | Signal-transducing molecule. May have a common pathway with IL6ST. The soluble form inhibits the biological activity of LIF by blocking its binding to receptors on target cells. |

## Storage

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| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

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|---|---|
| **Activity summary** | The leukemia inhibitory factor receptor also known as LIFR is a protein that plays an important role in cellular signaling. It has a mass of approximately 190-210 kDa and it is widely expressed in various tissues such as the liver muscle and bone. LIFR is a member of the interleukin 6 (IL-6) receptor family. The 'LIFR selector' refers to its ability to bind and select its specific ligand leukemia inhibitory factor (LIF) which initiates signal transduction processes. LIFR expression tends to be higher in developing tissues indicating its involvement during embryogenesis. |
| **Biological function summary** | The leukemia inhibitory factor receptor is involved in various cellular processes including differentiation proliferation and survival. When LIF binds to LIFR it forms a complex with gp130 another receptor protein which then activates downstream |

| | |
|---|---|
| | signaling pathways that regulate these cellular processes. This complex formation is an important component in the maintenance of stem cell pluripotency which is important in early development. The LIFR meaning in this context is essential for translating extracellular signals into cellular responses. |
| **Pathways** | The leukemia inhibitory factor receptor plays a critical role in the JAK/STAT signaling pathway. This pathway is significant for transmitting information received from extracellular chemical signals to the cell nucleus resulting in DNA transcription. LIFR closely interacts with other proteins like STAT3 and JAK1 which further propagate the signaling cascade initiated by LIF binding. Another pathway involving LIFR is the MAPK/ERK pathway a major pathway that influences cell growth and differentiation. These pathways highlight the interconnectivity of LIFR in regulating key cellular functions. |
| **Associated diseases and disorders** | LIFR has been linked to cancer progression and osteoporosis. Abnormal LIFR signaling can lead to unchecked cellular proliferation contributing to tumorigenesis in various cancers such as liver and breast cancer. LIFR also interacts with proteins like gp130 and the aforementioned STAT3 in the cancerous context. In osteoporosis altered LIFR expression affects bone metabolism potentially leading to increased bone resorption and weakening. The role of LIFR in these diseases demonstrates its potential as a therapeutic target and its importance in maintaining normal tissue homeostasis. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

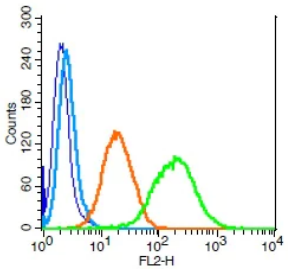
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

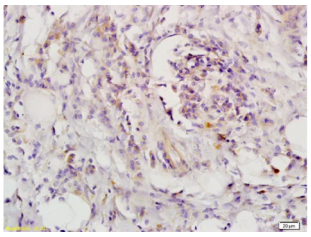
## 3 product images




### Flow Cytometry - Anti-LIFR antibody (ab202847)

LIFR Flow Cytometry staining using rabbit Anti-LIFR antibody

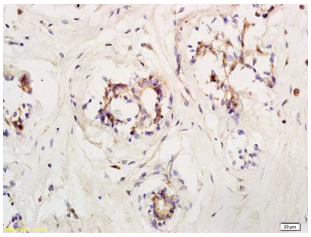
Flow Cytometry of Human U937 cells with ab216508 at 1/100



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LIFR antibody (ab202847)

LIFR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-LIFR antibody

Immunohistochemical analysis of formalin-fixed paraffin-embedded Human colon carcinomal tissue labeling LIFR with ab202847 at 1/200 dilution followed by conjugation to the secondary antibody and DAB staining.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LIFR antibody (ab202847)

LIFR Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-LIFR antibody

Immunohistochemical analysis of formalin-fixed paraffin-embedded Human breast carcinomal tissue labeling LIFR with ab202847 at 1/200 dilution followed by conjugation to the secondary antibody and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.