abcam

ab318273

Anti-Leptin Receptor antibody [EPR28293-79] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR28293-79
Purification technique	Affinity purification Protein A
Concentration	1.012 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-

Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

WB

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Lepr

Function	Receptor for hormone LEP/leptin (Probable) (PubMed:11861497). On ligand binding, mediates LEP central and peripheral effects through the activation of

different signaling pathways such as JAK2/STAT3 and MAPK cascade/FOS (PubMed:10799542, PubMed:11861497, PubMed:11923481, PubMed:25383904). In the hypothalamus, LEP acts as an appetite-regulating factor that induces a decrease in food intake and an increase in energy consumption by inducing anorexinogenic factors and suppressing orexigenic neuropeptides, also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones (PubMed:10660043, PubMed:12594516). In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic and affects innate and adaptive immunity (PubMed:11923481, PubMed:25383904). Control of energy homeostasis and melanocortin production (stimulation of POMC and full repression of AgRP transcription) is mediated by STAT3 signaling, whereas distinct signals regulate NPY and the control of fertility, growth and glucose homeostasis (PubMed:12594516). Involved in the regulation of counter-regulatory response to hypoglycemia by inhibiting neurons of the parabrachial nucleus (PubMed:25383904). Has a specific effect on T lymphocyte responses, differentially regulating the proliferation of naive and memory T-cells. Leptin increases Th1 and suppresses Th2 cytokine production (PubMed:9732873). Isoform A. May transport LEP across the blood-brain barrier. Binds LEP and mediates LEP endocytosis (PubMed:17620316, PubMed:20223942). Does not induce phosphorylation of and activate STAT3 (PubMed:11923481, PubMed:20223942). Isoform E. Antagonizes Isoform A and isoform B-mediated LEP binding and endocytosis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab318273 is the carrirer-free version of ab318272.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

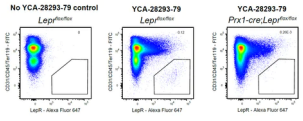
We do not recommend this combination. It is not covered by our product promise.

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.

2 product images



Flow Cytometry - Anti-Leptin Receptor antibody [EPR28293-79] - BSA and Azide free (ab318273)

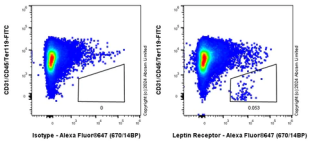
Leptin Receptor Flow Cytometry staining using rabbit Anti-Leptin Receptor antibody

This data was developed using ab318272, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Isotype (Left) / WT Mouse bone marrow (middle) / Prx1 KO Mouse bone marrow (Right) cells labelling Leptin Receptor with ab318272 at 1/200 dilution (0.1ug) / Middle and Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/2000 dilution was used as the secondary antibody.

Mouse bone marrow are co-stained with CD45-CD31-TER119 conjugated FITC (530/30BP).
Gated on viable cell.
The result was kindly provided by Dr Bo Shen's lab, NIBS.



Flow Cytometry - Anti-Leptin Receptor antibody [EPR28293-79] - BSA and Azide free (ab318273)

Leptin Receptor Flow Cytometry staining of Mouse bone marrow using rabbit Anti-Leptin Receptor antibody

This data was developed using ab318272, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of Mouse bone marrow cells labelling Leptin Receptor with ab318272 at 1/200 dilution (0.1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Mouse bone marrow are co-stained with CD45-CD31-TER119 conjugated FITC (530/30BP).
Gated on viable cell.

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