abcam

ab282023

Anti-IL27RA/WSX-1 antibody [EPR24560-54] - BSA and Azide free

Recombinant | RabMAb

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	EPR24560-54
Purification technique	Affinity purification Protein A
Concentration	0.991 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Target data

See full target information IL27RA

Function	Receptor for IL27. Requires IL6ST/GP130 to mediate signal transduction in response to IL27. This signaling system acts through STAT3 and STAT1. Acts as a receptor for the neuroprotective peptide humanin as part of a complex with IL6ST/GP130 and CNTFR (PubMed:19386761). Involved in the regulation of Th1-type immune responses. Also appears to be involved in innate defense mechanisms.

Storage

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

Notes

ab282023 is the carrier-free version of ab281998.

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.

Supplementary info

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

Activity summary	The WSX-1 protein also known as IL-27Rα or TCCR is a subunit of the interleukin-27 receptor. It weighs approximately 74 kDa and is mainly expressed on various immune cells including T cells B cells and monocytes. WSX-1 engages in the immune signaling by interacting specifically with its ligand IL-27 to drive immunological responses. This receptor belongs to the type I cytokine receptor family and is structurally characterized by certain conserved motifs important for its signaling functions.
Biological function summary	WSX-1 plays a role in regulating immune cell activity and differentiation. It acts as a part of a receptor complex with gp130 to form the IL-27 receptor which transmits signals that modulate the activity of T helper cells. This signaling influences the production of pro-inflammatory and anti-inflammatory cytokines impacting immune system balance. The function of WSX-1 remains critical for controlling inflammatory responses and ensuring immune tolerance.
Pathways	WSX-1 contributes to the JAK/STAT signaling pathway and influences the differentiation of Th1 cells. The connection to JAK/STAT signaling involves various proteins such as STAT1 and STAT3 which transduce IL-27-induced signals leading to gene expression changes in immune cells. Through its action in these pathways WSX-1 regulates immune responses and can influence inflammation dynamics in various biological contexts.
Associated diseases and disorders	WSX-1 has associations with autoimmune diseases and infectious conditions. Alterations in its signaling pathways can lead to dysregulated immune responses contributing to diseases like multiple sclerosis and inflammatory bowel disease. The protein's interaction with IL-27 is central in these conditions as it influences the pro-inflammatory and regulatory functions of the immune system. Furthermore studies suggest a link between WSX-1 activity and the modulation of responses against infections linking it to potential therapeutic targets for managing related disorders.

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

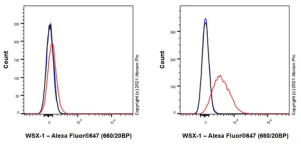
We do not recommend this combination. It is not covered by our product promise.

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.

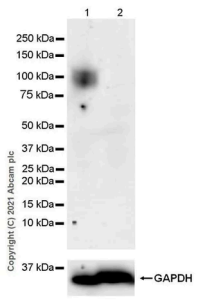
4 product images



Flow Cytometry - Anti-IL27RA/WSX-1 antibody [EPR24560-54] - BSA and Azide free (ab282023)

IL27RA/WSX-1 Flow Cytometry staining using rabbit Anti-IL27RA/WSX-1 antibody

This data was developed using ab281998, the same antibody clone in a different buffer formulation.
Flow cytometric analysis of LNCaP (Human prostate carcinoma epithelial cell, Left)/ HDLM-2 (Human Hodgkin lymphoma, Right) cells labelling WSX-1 with ab281998 at 1/500 dilution (0.1ug) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 647, ab150079) at 1/2000 dilution was used as the secondary antibody.
Negative control: LNCaP (PMID:28612255) Gated on viable cells.



Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] - BSA and Azide free (ab282023)

IL27RA/WSX-1 Western blot staining using rabbit Anti-IL27RA/WSX-1 antibody

This data was developed using ab281998, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST

The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID: 24771852, 28612255).

Negative control: LNCaP (PMID: 28612255).

Exposure time: 125 seconds
All lanes:
Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] (ab281998) at 1/1000 dilution

Lane 1:
HDLM-2 (human Hodgkin lymphoma) whole cell lysate at 20 µg

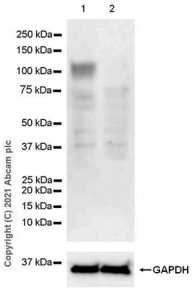
Lane 2:
LNCaP (human prostate carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 69 kDa

Observed band size: 95 kDa



Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] - BSA and Azide free (ab282023)

IL27RA/WSX-1 Western blot staining using rabbit Anti-IL27RA/WSX-1 antibody

This data was developed using ab281998, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST

The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID: 24771852, 28612255).

WSX-1 is a glycoprotein and can be de-glycosylated by PNGase F.

Exposure time: 3 minutes

All lanes:
Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] (ab281998) at 1/1000 dilution

Lane 1:
HDLM-2 (human Hodgkin lymphoma) whole cell lysate at 15 µg

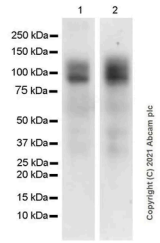
Lane 2:
HDLM-2 whole cell lysate treated with PNGase F, at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 69 kDa

Observed band size: 95 kDa



Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] - BSA and Azide free (ab282023)

IL27RA/WSX-1 Western blot staining using rabbit Anti-IL27RA/WSX-1 antibody

This data was developed using ab281998, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST

The expression profile/molecular weight observed is consistent with what has been described in the literature (PMID: 24771852, 28612255).

This blot was developed using a higher sensitivity ECL substrate.

Exposure time: 81 seconds

All lanes:
Western blot - Anti-IL27RA/WSX-1 antibody [EPR24560-54] (ab281998) at 1/1000 dilution

Lane 1:
A375 (human malignant melanoma epithelial cell) whole cell lysate at 20 µg

Lane 2:
U937 (human histiocytic lymphoma monocyte) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 69 kDa

Observed band size: 115 kDa, 95 kDa

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