abcam

Product datasheet

Anti-CD90 / Thy1 antibody [MRC OX-7] - BSA and Azide free ab222781

1 References 3 Images

Overview

Product name	Anti-CD90 / Thy1 antibody [MRC OX-7] - BSA and Azide free
Description	Mouse monoclonal [MRC OX-7] to CD90 / Thy1 - BSA and Azide free
Host species	Mouse
Tested applications	**Suitable for:** WB, Flow Cyt (Intra), ICC
Species reactivity	**Reacts with:** Rat **Predicted to work with:** Mouse, Rabbit, Horse, Guinea pig
Immunogen	Full length protein. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: rat brain tissue lysate and PC12 whole cell lysate. IF/ICC: PC12 cells. Flow Cyt: Rat splenocytes.
General notes	The affinity of the Fab' of MRC OX-7 for rat Thy-1 is 3 x $10^9 m^{-1}$ and for mouse Thy-1.1 is 3 x $10^8 m^{-1}$. ab222781 is the carrier-free version of **ab225**. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. 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. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituent: PBS
Carrier free	Yes
Purity	Protein G purified
Clonality	Monoclonal
Clone number	MRC OX-7
Myeloma	NS1
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab222781 in the following tested applications.

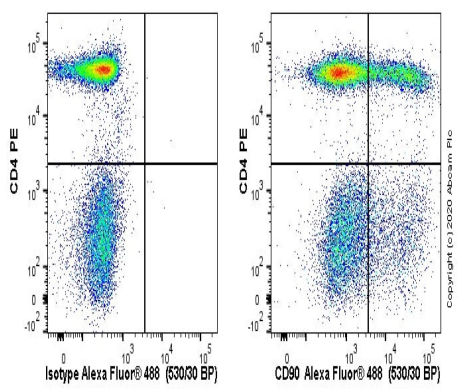
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 5 µg/ml. Detects a band of approximately 35-37 kDa (predicted molecular weight: 17 kDa). Observed molecular weight may vary depending on the glycosylation level of the target.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.

Target

Function	May play a role in cell-cell or cell-ligand interactions during synaptogenesis and other events in the brain.
Sequence similarities	Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Cellular localization	Cell membrane.

Images



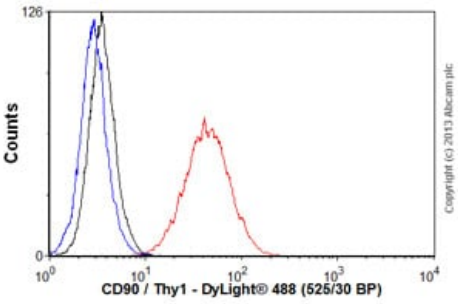
Flow Cytometry - Anti-CD90 / Thy1 antibody [MRC OX-7] - BSA and Azide free (ab222781)

Flow cytometry staining of Lewis rat splenocytes with ab222781 (right) or mouse IgG1κ (**ab170190**) isotype (left). Cells were incubated for 30 min on ice in 1x PBS containing 10 % rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab222781) or mouse IgG1κ (**ab170190**) isotype ($1x10^6$ in 100 µL at 0.2 µg/ml) for 30 min on ice.

The secondary antibody Goat anti-mouse IgG H&L (Alexa Fluor ® 488, pre-adsorbed) (**ab150117**) was used at dilution for 30 min on ice.

The cells were simultaneously stained with CD4.

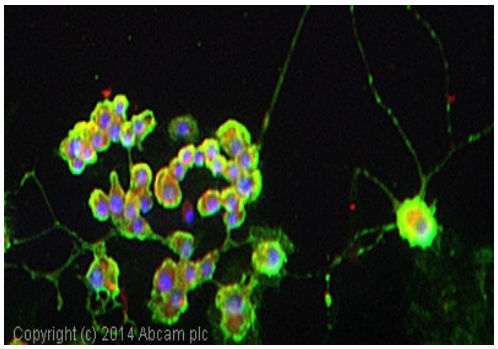
Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on live CD3 positive T cells.



Flow Cytometry - Anti-CD90 / Thy1 antibody [MRC OX-7] - BSA and Azide free (ab222781)

The flow cytometry data shown was generated using the same antibody clone in a different buffer formulation (**ab225**).

Overlay histogram showing PC12 cells stained with **ab225** (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab225**, 0.1µg/$1x10^6$ cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [B11/6] (**ab91353**, 1µg/$1x10^6$ cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive result in 80% methanol (5 min) fixed PC12 cells used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Anti-CD90 / Thy1 antibody [MRC OX-7] - BSA and Azide free (ab222781)

The ICC/IF data shown was generated using the same antibody clone in a different buffer formulation (**ab225**).

ab225 stained PC12 cells. The cells were 100% methanol fixed for 5 minutes at -20°C and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab225** at 5µg/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150117**) used at a 1/1000 dilution for 1hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200

dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1hour at room temperature.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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