abcam

Product datasheet

Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free ab261913

Recombinant RabMAb

8 Images

Overview

Product name	Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free
Description	Rabbit monoclonal [EPR21950-241] to TBR2 / Eomes - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IHC-P, IHC-Fr, IP **Unsuitable for:** Flow Cyt or WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human tonsil, E14.5 mouse cerebral cortex and E14.5 rat cerebral cortex tissues. IHC-Fr: Mouse E14.5 cerebrum and Rat E14.5 cerebrum tissue. ICC/IF: Mouse primary neuron/glia cells. IP: Mouse E14 brain tissue lysate.
General notes	ab261913 is the carrier-free version of **ab216870**. 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. 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 production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21950-241
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab261913 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
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

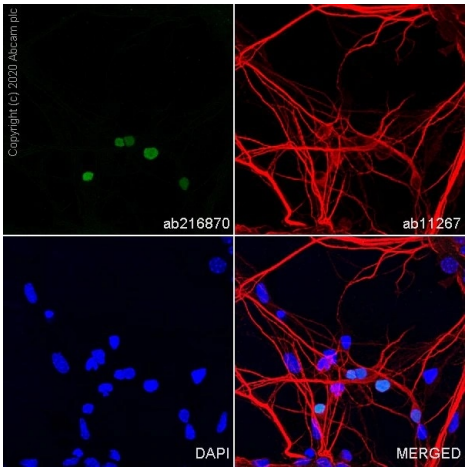
Application notes Is unsuitable for Flow Cyt or WB.

Target

Function	Functions as a transcriptional activator playing a crucial role during development. Functions in trophoblast differentiation and later in gastrulation, regulating both mesoderm delamination and endoderm specification. Plays a role in brain development being required for the specification and the proliferation of the intermediate progenitor cells and their progeny in the cerebral cortex. Also involved in the differentiation of CD8+ T-cells during immune response regulating the expression of lytic effector genes.
Tissue specificity	Expressed in CD8+ T-cells.
Involvement in disease	Note=A translocation t(3;10)(p24;q23) located 215 kb 3' to the EOMES gene but leading to loss of its expression was identified in a large consanguineous family. Homozygous silencing produces microcephaly associated with corpus callosum agenesis, bilateral polymicrogyria, ventricular dilatation and a small cerebellum.

Sequence similarities	Contains 1 T-box DNA-binding domain.
Developmental stage	Detected at 7 weeks of development in the forebrain floorplate of the CNS. Expressed within the mantle layer and migrating neuroblasts of the telencephalon at 12.5 weeks of development.
Cellular localization	Nucleus.

Images

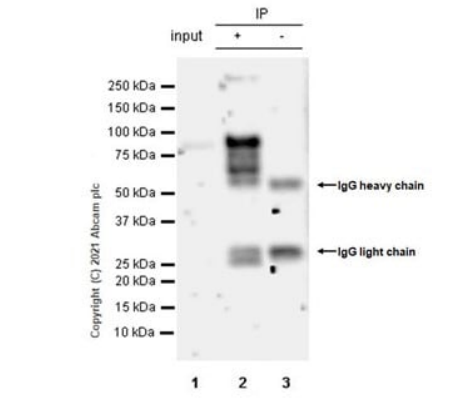


Immunocytochemistry/ Immunofluorescence - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).

Immunocytochemistry confocal image showing nuclear staining in mouse primary neuron cells. Anti-TBR2 is stained with **ab216870** in a 1/100 dilution, and 2µg/ml AlexaFluor®488 Goat anti-Rabbit secondary (**ab150077**). Nuclear counterstaining is DAPI (blue).

The negative control is **ab11267** Anti-MAP2 mouse monoclonal antibody with **ab150120** AlexaFluor®594 Goat anti-Mouse secondary.



Immunoprecipitation - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).

TBR2 / Eomes was immunoprecipitated from 0.35mg Mouse E14 brain tissue lysate 10µg with **ab216870** at 1/50 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using **ab216870** 1/1000 dilution (0.67 µg/ml). VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used as the secondary antibody at 1/5000 dilution.

Lane 1: Mouse E14 brain tissue lysate 10 µg

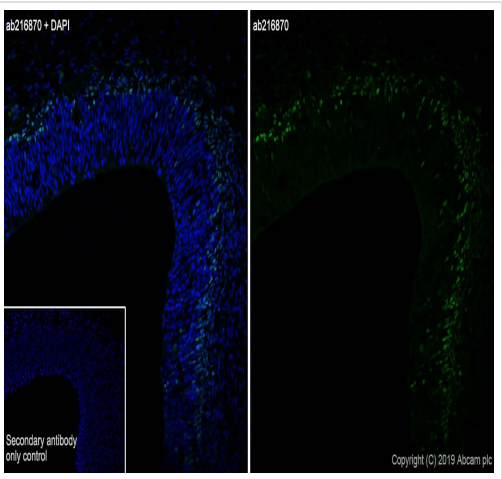
Lane 2: **ab216870** IP in Mouse E14 brain tissue lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab216870** in Mouse E14 brain tissue lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 min

The band is consistent with what has been described in the literature (PMID: 26749212).

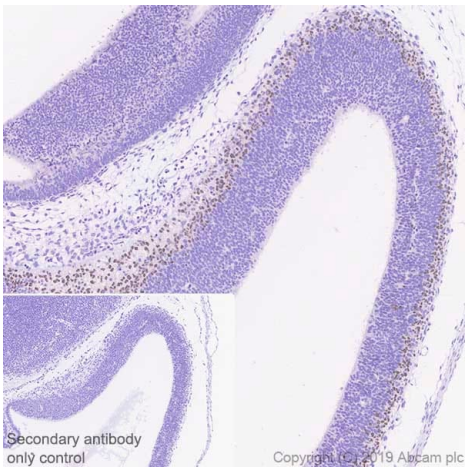


Immunohistochemistry (Frozen sections) - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

Immunohistochemical analysis of 4% PFA fixed 0.2% Triton X-100 permeabilized frozen Rat E14.5 cerebrum tissue labeling EOMES with **ab216870** at 1/100 (5.75 µg/ml) dilution followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution. The nuclear counterstain was DAPI (Blue). Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Positive staining in rat embryonic cerebrum (PMID: 24223221) is observed.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).



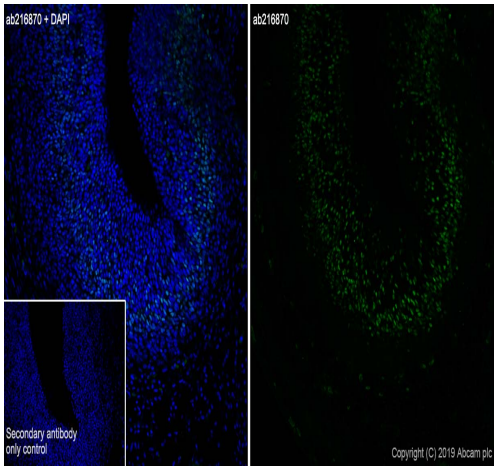
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

Immunohistochemical analysis of paraffin-embedded E14.5 rat cerebral cortex tissue labeling EOMES with **ab216870** at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on E14.5 rat cerebral cortex (PMID: 18725516) is observed. The section was incubated with **ab216870** for 30 mins at RT. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).

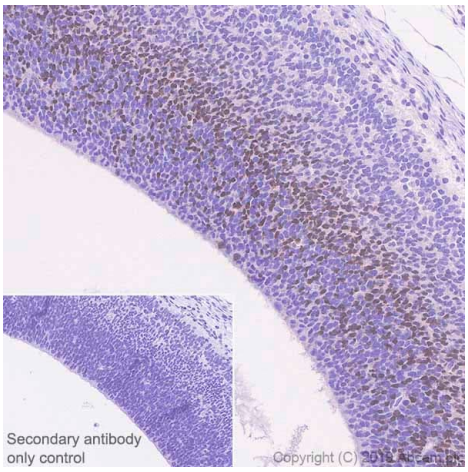


Immunohistochemistry (Frozen sections) - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

Immunohistochemical analysis of 4% paraformaldehyde-fixed 0.2% Triton X-100 permeabilized frozen Mouse E14.5 cerebrum tissue stained for EOMES using **ab216870** at 1/100 dilution in immunohistochemical analysis. The secondary antibody was **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution. The nuclear counterstain was DAPI (Blue). Positive staining in mouse embryonic cerebrum (PMID: 24223221) is observed. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody was **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).



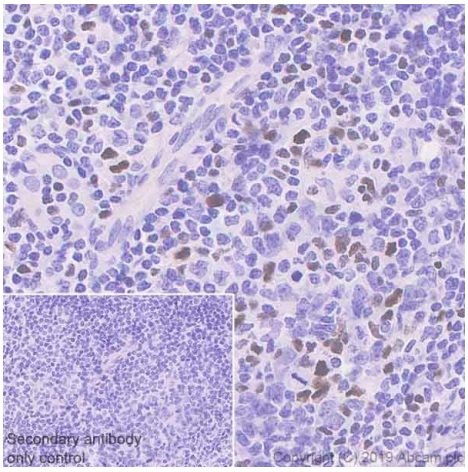
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

Immunohistochemical analysis of paraffin-embedded E14.5 mouse cerebral cortex tissue labeling EOMES with **ab216870** at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on E14.5 mouse cerebral cortex (PMID: 18725516) is observed. The section was incubated with **ab216870** for 30 mins at RT. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).



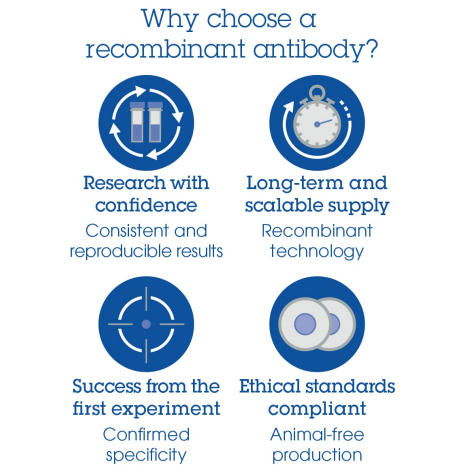
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling EOMES with **ab216870** at 1/1000 dilution followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Nuclear staining on human tonsil is observed. The section was incubated with **ab216870** for 30 mins at RT. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab216870**).



Anti-TBR2 / Eomes antibody [EPR21950-241] - BSA and Azide free (ab261913)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors