abcam

Product datasheet

Anti-TBR2 / Eomes antibody [EPR19012] ab183991



★★★★★ 8 Abreviews 43 References 7 Images

Overview

Product name Anti-TBR2 / Eomes antibody [EPR19012]

Description Rabbit monoclonal [EPR19012] to TBR2 / Eomes

Host species Rabbit

Tested applications Suitable for: ICC/IF, IHC-Fr, IHC-P

Species reactivity Reacts with: Mouse

Does not react with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Mouse hippocampus and E14 cortex tissues; IHC-Fr: Mouse E14.5 cortex and

hippocampus tissues; ICC/IF: Mouse primary neuron cells.

General notes 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 $\mathsf{RabMAb}^{\texttt{®}}$ 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR19012

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab183991 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		1/200.
IHC-Fr	★★★★★ (4)	1/1000. Antigen retrieval: Heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20).
IHC-P	★★★★★ (1)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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.

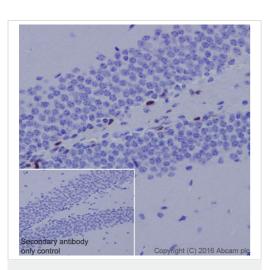
Developmental stage

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

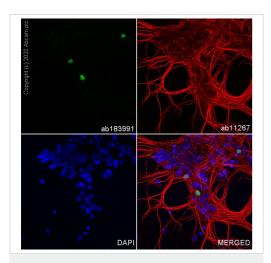
Immunohistochemical analysis of paraffin-embedded mouse hippocampus tissue labeling TBR2 / Eomes with ab183991 at 1/2000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Nucleus staining on intermediate neuronal progenitors of mouse hippocampus is observed [PMID: 22553033].

Counter stained with Hematoxylin.

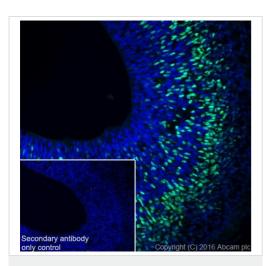
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling TBR2 / Eomes with ab183991 at 1/500 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (2 μ g/mL) (Green). Confocal image showing nuclear staining in mouse primary neuron cell. Confocal scanning Z step was set as 0.3 μ m followed by image processing with maximum Z projection. **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 dilution (4 μ g/mL) followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (2 μ g/mL) (Red). The nuclear counterstain was DAPI (Blue).



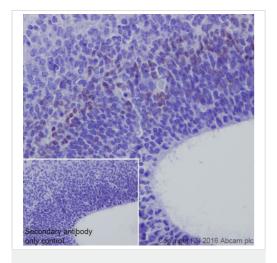
Immunohistochemistry (Frozen sections) - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse E14.5 cortex tissue labeling TBR2 / Eomes with ab183991 at 1/1000 dilution, followed by Goat Anti-Rabbit lgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Specific staining on E14.5 mouse cortex is observed.

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

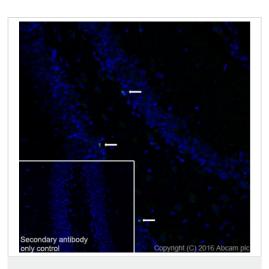
Immunohistochemical analysis of paraffin-embedded mouse E14 cortex tissue labeling TBR2 / Eomes with ab183991 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Nucleus staining on the cortex of mouse E14 is observed [PMID: 22553033].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab97051</u> at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



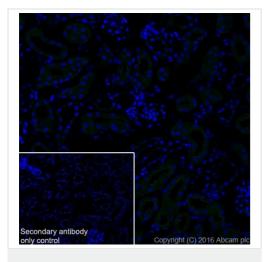
Immunohistochemistry (Frozen sections) - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse hippocampus tissue labeling TBR2 / Eomes with ab183991 at 1/1000 dilution, followed by Goat Anti-Rabbit lgG (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Specific staining on adult mouse hippocampus is observed.

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> at 1/1000 dilution.



Immunohistochemistry (Frozen sections) - Anti-TBR2 / Eomes antibody [EPR19012] (ab183991)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen adult mouse kidney tissue labeling TBR2 / Eomes with ab183991 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Negative control tissue; very weak staining is due to autoflorescence of the kidney section.

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab150077** at 1/1000 dilution.



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