

Rabbit Anti-TBR2 antibody

SL11331R

Product Name:	TBR2
Chinese Name:	脱中胚蛋白抗体
Alias:	Eomes; EOMES_HUMAN; Eomesodermin; Eomesodermin homolog; t box brain 2; T-
	box brain protein 2; T-brain-2; Tbr 2; TBR-2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow, Horse, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	73kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TBR2:301-400/686
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	EOMES (eomesodermin homolog), also known as TBR2 (T-box-brain2), is the 686
	amino acid human homolog of the mouse Eomes protein that contains one T-box DNA
	binding domain. Genes that contain T-box domains encode proteins that function as
	transcription factors and are often involved in the regulation of various developmental
	events. Localized to the nucleus and expressed in the developing brain, EOMES is
	thought to be involved in neuronal migration and division and may play a role in

trophoblast development and gastrulation. Silencing of the EOMES gene can cause mutated or arrested development and may lead to microcephaly disorders which are characterized by reduced head circumference and a malformed brain.

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.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in CD8+ T-cells.

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.

Similarity:

Contains 1 T-box DNA-binding domain.

SWISS:

095936

Gene ID:

8320

Database links:

Entrez Gene: 8320 Human

Entrez Gene: 13813 Mouse

Omim: 604615 Human

SwissProt: O95936 Human

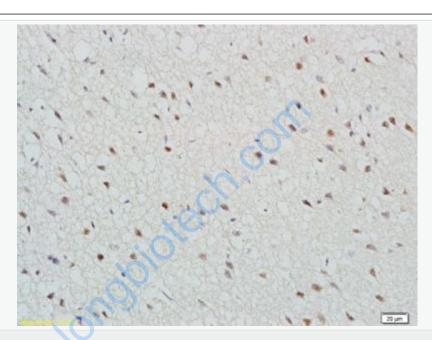
SwissProt: O54839 Mouse

Unigene: 591663 Human

Unigene: 200692 Mouse

Important Note:

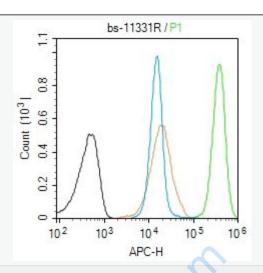
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Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-TBR2 Polyclonal Antibody, Unconjugated(SL11331R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-TBR2antibody (SL11331R)

Dilution: $1\mu g / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.