# EOMES (H-109): sc-98555



The Power to Question

## **BACKGROUND**

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.

## **REFERENCES**

- Kimura, N., et al. 1999. A novel mammalian T-box-containing gene, Tbr2, expressed in mouse developing brain. Brain Res. Dev. Brain Res. 115: 183-193.
- Yi, C.H., et al. 1999. Identification, mapping, and phylogenomic analysis of four new human members of the T-box gene family: EOMES, TBX6, TBX18, and TBX19. Genomics 55: 10-20.

#### CHROMOSOMAL LOCATION

Genetic locus: EOMES (human) mapping to 3p24.1; Eomes (mouse) mapping to 9 F3.

## **SOURCE**

EOMES (H-109) is a rabbit polyclonal antibody raised against amino acids 1-98 mapping at the N-terminus of EOMES of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-98555 X, 200  $\mu g$ /0.1 ml.

## **APPLICATIONS**

EOMES (H-109) is recommended for detection of EOMES of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EOMES siRNA (h): sc-77277, EOMES siRNA (m): sc-77278, EOMES shRNA Plasmid (h): sc-77277-SH, EOMES shRNA Plasmid (m): sc-77278-SH, EOMES shRNA (h) Lentiviral Particles: sc-77277-V and EOMES shRNA (m) Lentiviral Particles: sc-77278-V.

 ${\sf EOMES}$  (H-109) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

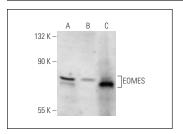
Molecular Weight of EOMES: 73 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, IMR-32 cell lysate: sc-2409 or mouse brain extract: sc-2253.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**



EOMES (H-109): sc-98555. Western blot analysis of EOMES expression in Hep G2 (A) and IMR-32 (B) whole cell lysates and mouse brain tissue extract (C).

## **SELECT PRODUCT CITATIONS**

 Tofukuji, S., et al. 2012. Identification of a new pathway for Th1 cell development induced by cooperative stimulation with IL-4 and TGF-β. J. Immunol. 188: 4846-4857.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **EOMES (1A8): sc-293481**, our highly recommended monoclonal alternative to EOMES (H-109).

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