

Goat Anti-EMI2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1366a

Specification

Reactivity

Goat Anti-EMI2 Antibody - Product Information

Application WB, IF, FC, ICC, E

Primary Accession <u>Q4G163</u>

Other Accession NP 001025031, 286151, 78803 (mouse),

315034 (rat) Mouse, Rat

Predicted Human, Pig, Dog, Cow

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG Calculated MW 78402

Goat Anti-EMI2 Antibody - Additional Information

Gene ID 286151

Other Names

F-box only protein 43, Endogenous meiotic inhibitor 2, FBXO43, EMI2

Format

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-EMI2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EMI2 Antibody - Protein Information

Name FBXO43

Synonyms EMI2

Function

Required to establish and maintain the arrest of oocytes at the second meiotic metaphase until fertilization. Acts by inhibiting the anaphase-promoting complex/cyclosome (APC/C) ubiquitin ligase. Probably recognizes and binds to some phosphorylated proteins and promotes their



ubiquitination and degradation (PubMed:34052850, PubMed:34595750). Plays a vital role in modulating the ubiquitilation of CCNB1 and CDK1 during gametogenesis.

Tissue Location Expressed in the testis.

Goat Anti-EMI2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Goat Anti-EMI2 Antibody - Images

Goat Anti-EMI2 Antibody - Background

Members of the F-box protein family, such as FBXO43, are characterized by an approximately 40-amino acid F-box motif. SCF complexes, formed by SKP1 (MIM 601434), cullin (see CUL1; MIM 603134), and F-box proteins, act as protein-ubiquitin ligases. F-box proteins interact with SKP1 through the F box, and they interact with ubiquitination targets through other protein interaction domains (Jin et al., 2004 [PubMed 15520277]).

Goat Anti-EMI2 Antibody - References

Cdc2 and Mos regulate Emi2 stability to promote the meiosis I-meiosis II transition. Tang W, et al. Mol Biol Cell, 2008 Aug. PMID 18550795.

Mammalian Emi2 mediates cytostatic arrest and transduces the signal for meiotic exit via Cdc20. Shoji S, et al. EMBO J, 2006 Feb 22. PMID 16456547.

CaMKII and polo-like kinase 1 sequentially phosphorylate the cytostatic factor Emi2/XErp1 to trigger its destruction and meiotic exit. Hansen DV, et al. Proc Natl Acad Sci U S A, 2006 Jan 17. PMID 16407128.

Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.

A role for the anaphase-promoting complex inhibitor Emi2/XErp1, a homolog of early mitotic inhibitor 1, in cytostatic factor arrest of Xenopus eggs. Tung JJ, et al. Proc Natl Acad Sci U S A, 2005 Mar 22. PMID 15753281.