

OVOL2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54806

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9BRP0
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30438
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OVOL2
Epitope Specificity	75-180/275
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nuclear.
SIMILARITY	Belongs to the krueppel C2H2-type zinc-finger protein family. Contains 4 C2H2-type zinc fingers.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The Ovo family of zinc-finger transcription factors encode evolutionarily conserved genes including those from <i>Caenorhabditis elegans</i> , <i>Drosophila melanogaster</i> , mouse and human. Members of the Ovo family include Ovo1 and Ovo2. Ovo1 acts as a transcriptional repressor by interacting with key developmental signaling pathways such as Wnt and TGF- β /BMP. Specifically, Ovo1 represses c-Myc and Id2 genes and establishes a balance between proliferation and differentiation of progenitor cells. Deletion of Ovo1 in mice leads to germ cell degeneration and defective sperm production in adult males. Ovo1 has also been shown to repress itself as well as Ovo2, which is thought to regulate neural development and vascular angiogenesis during embryogenesis.

Additional Information

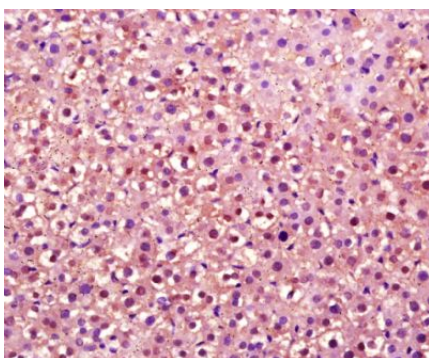
Gene ID	58495
Other Names	Transcription factor Ovo-like 2, hOvo2, Zinc finger protein 339, OVOL2, ZNF339
Target/Specificity	Expressed in testis, ovary, heart and skeletal muscle.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	OVOL2 (HGNC:15804)
Synonyms	ZNF339
Function	Zinc-finger transcription repressor factor (PubMed: 19700410). Plays a critical role in maintaining the identity of epithelial lineages by suppressing epithelial-to mesenchymal transition (EMT) mainly through the repression of ZEB1, an EMT inducer (By similarity). Positively regulates neuronal differentiation (By similarity). Suppresses cell cycling and terminal differentiation of keratinocytes by directly repressing MYC and NOTCH1 (PubMed: 19700410). Important for the correct development of primordial germ cells in embryos (By similarity). Plays dual functions in thermogenesis and adipogenesis to maintain energy balance. Essential for brown/beige adipose tissue- mediated thermogenesis, is necessary for the development of brown adipocytes. In white adipose tissues, limits adipogenesis by blocking CEBPA binding to its transcriptional targets and inhibiting its transcription factor activity (By similarity).
Cellular Location	Nucleus {ECO:0000250 UniProtKB:Q8CIV7}.
Tissue Location	Expressed in testis, ovary, heart and skeletal muscle (PubMed:12213202). Expressed in the cornea, but absent from the corneal endothelium (PubMed:26749309).

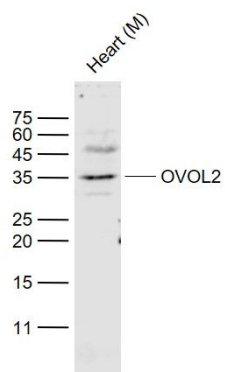
Images



Paraformaldehyde-fixed, paraffin embedded (rat liver tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (OVOL2) Polyclonal Antibody, Unconjugated (AP54806) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Sample:

Lane 1: Heart (Mouse) Lysate at 40 ug
 Primary: Anti-OVOL2 (AP54806) at 1/300 dilution
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
 Predicted band size: 37 kD
 Observed band size: 35 kD



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.