

OVCA1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58295

Specification

OVCA1 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession <u>Q9BZG8</u>

Reactivity
Host
Clonality
Polyclonal

Clonality Polyclo
Calculated MW 49 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human OVCA1

Epitope Specificity 251-350/443

Isotype IgG
Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus. Cytoplasm. Note=Punctate,

primarily perinuclear localization.

SIMILARITY Belongs to the DPH1/DPH2 family. DPH1

subfamily.

SUBUNIT Interacts with DPH2 (By similarity).

Interacts with RBM8A.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

affinity purified by Protein A

OVCA1 is required for the first step in the synthesis of diphthamide, a unique posttranslationally modified histidine found only in translation elongation factor-2 (EEF2; MIM 130610). This modification is conserved from archaebacteria to humans and serves as the target for ADP-ribosylation and inactivation of EEF2 by diphtheria toxin (DT) and Pseudomonas exotoxin A. OVCA1 is one of several enzymes involved in synthesis of diphthamide in EEF2.

OVCA1 Polyclonal Antibody - Additional Information

Gene ID 1801

Other Names

2-(3-amino-3-carboxypropyl)histidine synthase subunit 1, 2.5.1.108, DPH1, DPH2L, DPH2L1, OVCA1

Target/Specificity

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, mammary gland, colon, small intestine, testis and ovary. Reduced expression in primary breast



and ovarian tumors.

Dilution

WB~~1:1000<br \><span class</pre>

="dilution IHC-P">IHC-P~~N/A<br \><span class

="dilution IHC-F">IHC-F~~N/A<br \><span class

="dilution IF">IF~~1:50~200
span class = "dilution E">E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

OVCA1 Polyclonal Antibody - Protein Information

Name DPH1 {ECO:0000303|PubMed:26220823}

Function

Catalyzes the first step of diphthamide biosynthesis, a post- translational modification of histidine which occurs in elongation factor 2 (PubMed:30877278). DPH1 and DPH2 transfer a 3-amino-3- carboxypropyl (ACP) group from S-adenosyl-L-methionine (SAM) to a histidine residue, the reaction is assisted by a reduction system comprising DPH3 and a NADH-dependent reductase (By similarity). Acts as a tumor suppressor (PubMed:10519411).

Cellular Location

Nucleus. Cytoplasm. Note=Punctate, primarily perinuclear localization.

Tissue Location

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, mammary gland, colon, small intestine, testis and ovary. Reduced expression in primary breast and ovarian tumors.

OVCA1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OVCA1 Polyclonal Antibody - Images