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EYA2 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17094c

Specification

EYA2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession O00167

EYA2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2139

Other Names
Eyes absent homolog 2, EYA2, EAB1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

EYA2 Antibody (Center) Blocking Peptide - Protein Information

Name EYA2

Synonyms EAB1

Function
Functions both as protein phosphatase and as transcriptional coactivator for SIX1, and probably also for SIX2, SIX4 and SIX5 (PubMed:12500905, PubMed:23435380). Tyrosine phosphatase that dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph) and promotes efficient DNA repair via the recruitment of DNA repair complexes containing MDC1. 'Tyr-142' phosphorylation of histone H2AX plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress (PubMed:19351884). Its function as histone phosphatase may contribute to its function in transcription regulation during organogenesis. Plays an important role in hypaxial muscle development together with SIX1 and DACH2; in this it is functionally redundant with EYA1 (PubMed:12500905).

Cellular Location
Cytoplasm. Nucleus Note=Retained in the cytoplasm via interaction with GNAZ and GNAI2 (PubMed:10906137). Interaction with SIX1, SIX2, SIX4 or SIX5 is required for translocation to the

nucleus (PubMed:10906137, PubMed:12500905).

Tissue Location
Highest expression in muscle with lower levels in kidney, placenta, pancreas, brain and heart

EYA2 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

EYA2 Antibody (Center) Blocking Peptide - Images

EYA2 Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the eyes absent (EYA) familyof proteins. The encoded protein may be post-translationallymodified and may play a role in eye development. A similar proteinin mice can act as a transcriptional activator. Alternativesplicing results in multiple transcript variants, but thefull-length natures of all of these variants have not yet beendetermined.

EYA2 Antibody (Center) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Guo, J.T., et al. Zhonghua Zhong Liu Za Zhi 31(7):528-531(2009)