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Product datasheet

Anti-EYA4 antibody - Aminoterminal end ab47990

1 References

Overview

Product name	Anti-EYA4 antibody - Aminoterminal end
Description	Goat polyclonal to EYA4 - Aminoterminal end ⓘ This product is a fast track antibody. It has been affinity purified and shows high titre values against the immunizing peptide by ELISA. Read the terms of use »
Host species	Goat
Specificity	This antibody is expected to recognise isoforms a, c and d (NP_004091.2, NP_742102.1 and NP_742103.1 respectively).
Species reactivity	**Predicted to work with:** Mouse, Human ⚠
Immunogen	Synthetic peptide: EDSQDLNEQSVKKTC , corresponding to N terminal amino acids 2-16 of Human EYA4 Run BLAST with Run BLAST with

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Sodium Azide Constituents: 0.5% BSA, Tris saline, pH 7.3
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

Application notes	This antibody gave a positive result in ELISA against the immunizing peptide. Antibody detection limit dilution 1:128,000. Western Blot: Preliminary experiments gave an approx 50kDa band in Human and Mouse Brain lysates and in Pituitary Mouse cell line NIH 3T3 after 0.1µg/ml antibody staining. Please note that currently we cannot find an explanation in the literature for the band we observe given the calculated sizes of 69.5kDa, 67.1kDa and 69.4kDa according to NP_004091.2, NP_742102.1 and NP_742103.1 respectively. The 50kDa band was successfully blocked by incubation with the immunizing peptide. Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

Target

Function	Tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph). '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. Promotes efficient DNA repair by dephosphorylating H2AX, promoting the recruitment of DNA repair complexes containing MDC1. Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. May be involved in development of the eye.
Tissue specificity	Highly expressed in heart and skeletal muscle.
Involvement in disease	Defects in EYA4 are the cause of deafness autosomal dominant type 10 (DFNA10) [MIM:601316]. DFNA10 is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. Defects in EYA4 are the cause of cardiomyopathy dilated type 1J (CMD1J) [MIM:605362]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.
Sequence similarities	Belongs to the HAD-like hydrolase superfamily. EYA family.
Cellular localization	Cytoplasm. Nucleus.

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