

Anti-ARP6 [12A2.A3.C2]

Catalogue number: 153910

Sub-type:

Images:

Contributor

Inventor: Richard Meager

Institute: University of Georgia

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-ARP6 [12A2.A3.C2]

Alternate name: ARP6

Class: Monoclonal

Conjugate: Unconjugated

Description: Actin-related proteins (ARPs) are found in the nuclei of all eukaryotic cells, but their functions are generally understood only in the context of their presence in various yeast and animal chromatin-modifying complexes. Arabidopsis ARP8 shows 30 and 29% amino acid identity to yeast actin and Arabidopsis ACT2 in the regions of alignment, respectively. Because it is not closely related to yeast or human ARP8 and shows similar weak homology to yeast ARP8 and ARP9, the Arabidopsis ARP8 is considered a plant-specific orphan ARP. Arabidopsis thaliana ARP6 is a clear homolog of other eukaryotic ARP6s, including *Saccharomyces cerevisiae* ARP6, which was identified as a component of the SWR1 chromatin remodeling complex. Arabidopsis ARP6 is localized to the nucleus during interphase but dispersed away from the chromosomes during cell division. ARP6 expression was observed in all vegetative tissues as well as in a subset of reproductive tissues. Null mutations in ARP6 caused numerous defects, including altered development of the leaf, inflorescence, and flower as well as reduced female fertility and early flowering in both long- and short-day photoperiods.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity:

Selectivity:

Host:

Mouse

Immunogen: Protein

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Actin Related Protein 6

Target alternate names:

Target background: Actin-related proteins (ARPs) are found in the nuclei of all eukaryotic cells, but their functions are generally understood only in the context of their presence in various yeast and animal chromatin-modifying complexes. Arabidopsis ARP8 shows 30 and 29% amino acid identity to yeast actin and Arabidopsis ACT2 in the regions of alignment, respectively. Because it is not closely related to yeast or human ARP8 and shows similar weak homology to yeast ARP8 and ARP9, the Arabidopsis ARP8 is considered a plant-specific orphan ARP. Arabidopsis thaliana ARP6 is a clear homolog of other eukaryotic ARP6s, including *Saccharomyces cerevisiae* ARP6, which was identified as a component of the SWR1 chromatin remodeling complex. Arabidopsis ARP6 is localized to the nucleus during interphase but dispersed away from the chromosomes during cell division. ARP6 expression was observed in all vegetative tissues as well as in a subset of reproductive tissues. Null mutations in ARP6 caused numerous defects, including altered development of the leaf, inflorescence, and flower as well as reduced female fertility and early flowering in both long- and short-day photoperiods.

Molecular weight:

Ic50:

Applications

Application: ELISA ; IF ; WB

Application notes:

Handling

Format: Liquid

Concentration:

Passage number:

Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Kandasamy et al. 2010. Cytoskeleton (Hoboken). 67(11):729-43. PMID: 20862689. ; Differential sublocalization of actin variants within the nucleus. ; Meagher et al. 2010. Plant Signal Behav. 5(5):518-22. PMID: 21228632. ; Nuclear actin-related proteins at the core of epigenetic control. ; Kandasamy et al. 2008. Plant Cell Physiol. 49(5):858-63. PMID: 18385164. ; ACTIN-RELATED PROTEIN8 encodes an F-box protein localized to the nucleolus in Arabidopsis. ; Meagher et al. 2005. Plant Physiol. 139(4):1576-85. PMID: 16339804. ; Nuclear actin-related proteins as epigenetic regulators of development. ; Li et al. 2001. Plant Physiol. 127(3):711-9. PMID: 11706154. ; Rapid isolation of monoclonal antibodies. Monitoring enzymes in the phytochelatin synthesis pathway.