PPP1R10 Antibody

Mouse Monoclonal Antibody [Clone PCRP-PPP1R10-1G12]

Catalog No	Format	Size
5514-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5514-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5514-MSM2-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	

Product Details

Clone	PCRP-PPP1R10-1G12
Immunogen	Recombinant human PPP1R10 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2 / Kappa
Mol. Weight of Antigen	99.06kDa
Cellular Localization	Chromosome, Nucleus
Species Reactivity	Human
Positive Control	Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

**Optimal dilution for a specific application should be determined.*

Product Images for PPP1R10 Antibody

Specificity & Comments

Substrate-recognition component of the PNUTS-PP1 protein phosphatase complex, a protein phosphatase 1 (PP1) complex that promotes RNA polymerase II transcription pause-release, allowing transcription elongation (PubMed:39603239, PubMed:39603240). Promoter-proximal pausing by RNA polymerase II is a transcription halt following transcription initiation but prior to elongation, which acts as a checkpoint to control that transcripts are favorably configured for transcriptional elongation (PubMed:39603239, PubMed:39603240). The PNUTS-PP1 complex mediates the release of RNA polymerase II from promoter-proximal region of genes by catalyzing dephosphorylation of proteins involved in transcription, such as AFF4, CDK9, MEPCE, INTS12, NCBP1, POLR2M/GDOWN1 and SUPT6H (PubMed:39603239, PubMed:39603240). The PNUTS-PP1 complex also regulates RNA polymerase II transcription termination by mediating dephosphorylation of SUPT5H in termination zones downstream of poly(A) sites, thereby promoting deceleration of RNA polymerase II transcription (PubMed:31677974). PNUTS-PP1 complex is also involved in the response to replication stress by mediating dephosphorylation of POLR2A at 'Ser-5' of the CTD, promoting RNA polymerase II degradation (PubMed:33264625). The PNUTS-PP1 complex also plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase (By similarity). PNUTS-PP1 complex mediates dephosphorylation of MYC, promoting MYC stability by preventing MYC ubiquitination by the SCF(FBXW7) complex (PubMed:30158517). In addition to acts as a substrate-recognition component, PPP1R10/PNUTS also acts as a nuclear targeting subunit for the PNUTS-PP1 complex (PubMed:9450550). In some context, PPP1R10/PNUTS also acts as an inhibitor of protein phosphatase 1 (PP1) activity by preventing access to substrates, such as RB (PubMed:18360108).

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.