Datasheet for ABIN684091

anti-CDK9 antibody (pThr186) (Cy3)

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Overview

Quantity:	100 µL
Target:	CDK9
Binding Specificity:	pThr186
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDK9 antibody is conjugated to Cy3
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Flow Cytometry (FACS)

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human CDK9 around the phosphorylation site of Thr186
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Rat,Dog,Cow,Pig,Horse,Chicken
Purification:	Purified by Protein A.

Target Details

Target:	CDK9

Target Details

Alternative Name:	CDK9 (CDK9 Products)
Background:	Synonyms: TAK, C-2k, CTK1, CDC2L4, PITALRE, Cyclin-dependent kinase 9, Cell division cycle 2-like protein kinase 4, Cell division protein kinase 9, Serine/threonine-protein kinase PITALRE, Tat-associated kinase complex catalytic subunit, CDK9 Background: Protein kinase involved in the regulation of transcription. Member of the cyclin-dependent kinase pair (CDK9/cyclin-T) complex, also called positive transcription elongation factor b (P-TEFb), which facilitates the transition from abortive to productive elongation by phosphorylating the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAP II) POLR2A, SUPT5H and RDBP. This complex is inactive when in the 7SK snRNP complex form. Phosphorylates EP300, MYOD1, RPB1/POLR2A and AR, and the negative elongation factors DSIF and NELF. Regulates cytokine inducible transcription networks by facilitating promoter recognition of target transcription factors (e.g. TNF-inducible RELA/p65 activation and IL-6-inducible STAT3 signaling). Promotes RNA synthesis in genetic programs for cell growth, differentiation and viral pathogenesis. P-TEFb is also involved in cotranscriptional histone modification, mRNA processing and mRNA export. Modulates a complex network of chromatin modifications including histone H2B monoubiquitination (H2Bub1), H3 lysine 4 trimethylation (H3K4me3) and H3K36me3, integrates phosphorylation during transcription with chromatin modifications to control co-transcriptional histone mRNA processing. The CDK9/cyclin-K complex has also a kinase activity towards CTD of RNAP II and can substitute for CDK9/cyclin-T P-TEFb in vitro. Replication stress response protein, the CDK9/cyclin-K complex is required for genome integrity maintenance, by promoting cell cycle recovery from replication arrest and limiting single-stranded DNA amount in response to replication stress, thus reducing the breakdown of stalled replication forks and avoiding DNA damage. In addition, probable function in DNA repair of isoform 2 via interaction with KU70/XRCC6. Promotes cardiac myocyte enlargement.
Gene ID:	1025
UniProt:	P50750
Pathways:	Cell Division Cycle

Application Details

Application Notes:	FCM 1:20-100
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months