ARG45942
anti-PHF8 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PHF8
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PHF8
Species	Human
Immunogen	Recombinant protein containing to human PHF8.
Conjugation	Un-conjugated
Alternate Names	PHF8; KIAA1111; ZNF422; Histone lysine demethylase PHF8; EC 1.14.11.27; PHD finger protein 8

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
ICC/IF	5 µg/ml
WB	0.25-0.5 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 140 kDa

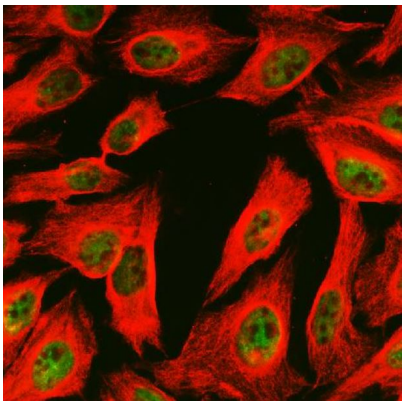
Properties

Form	Liquid
Purification	Affinity chromatography purified
Buffer	0.2% Na2HPO4, 0.9% NaCl and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -22°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

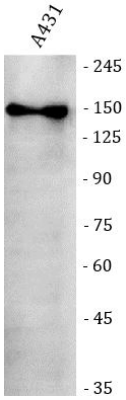
Gene Symbol	PHF8
Gene Full Name	PHD Finger Protein 8
Background	The protein encoded by this gene is a histone lysine demethylase that preferentially acts on histones in the monomethyl or dimethyl states. The encoded protein requires Fe(2+) ion, 2-oxoglutarate, and oxygen for its catalytic activity. The protein has an N-terminal PHD finger and a central Jumonji C domain. This gene is thought to function as a transcription activator. Defects in this gene are a cause of syndromic X-linked Siderius type intellectual disability (MRXSSD) and over-expression of this gene is associated with several forms of cancer. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2017]
Function	Histone lysine demethylase with selectivity for the di- and monomethyl states that plays a key role cell cycle progression, rDNA transcription and brain development. Demethylates mono- and dimethylated histone H3 'Lys-9' residue (H3K9Me1 and H3K9Me2), dimethylated H3 'Lys-27' (H3K27Me2) and monomethylated histone H4 'Lys-20' residue (H4K20Me1). Acts as a transcription activator as H3K9Me1, H3K9Me2, H3K27Me2 and H4K20Me1 are epigenetic repressive marks. Involved in cell cycle progression by being required to control G1-S transition. Acts as a coactivator of rDNA transcription, by activating polymerase I (pol I) mediated transcription of rRNA genes. Required for brain development, probably by regulating expression of neuron-specific genes. Only has activity toward H4K20Me1 when nucleosome is used as a substrate and when not histone octamer is used as substrate. May also have weak activity toward dimethylated H3 'Lys-36' (H3K36Me2), however, the relevance of this result remains unsure in vivo. Specifically binds trimethylated 'Lys-4' of histone H3 (H3K4me3), affecting histone demethylase specificity: has weak activity toward H3K9Me2 in absence of H3K4me3, while it has high activity toward H3K9me2 when binding H3K4me3. Positively modulates transcription of histone demethylase KDM5C, acting synergistically with transcription factor ARX; synergy may be related to enrichment of histone H3K4me3 in regulatory elements. [UniProt]
Calculated Mw	118 kDa
PTM	Phosphoprotein. [UniProt]. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



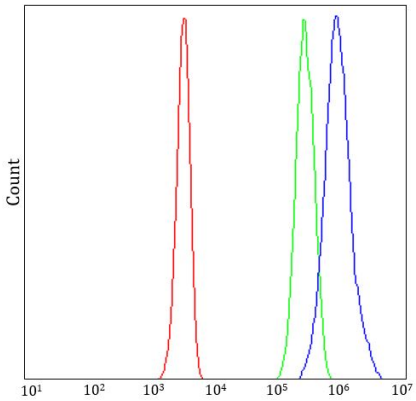
ARG45942 anti-PHF8 antibody ICC/IF image

Immunofluorescence: Hela stained with ARG45942 anti-PHF8 antibody at 5 µg/ml dilution.



ARG45942 anti-PHF8 antibody WB image

Western blot: A431 stained with ARG45942 anti-PHF8 antibody at 0.5 µg/ml dilution.



ARG45942 anti-PHF8 antibody FACS image

Flow Cytometry: Jurkat stained with ARG45942 anti-PHF8 antibody at 1 µg/10^6 cells dilution.