

ARG45943 anti-PIF1 antibody

Package: 50 μg Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PIF1
Tested Reactivity	Hu
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	lgG
Target Name	PIF1
Species	Human
Immunogen	Recombinant protein containing to human PIF1.
Conjugation	Un-conjugated
Alternate Names	PIF1 5'-To-3' DNA Helicase; PIF1; C15orf20; ATP-dependent DNA helicase PIF1; EC 3.6.4.12; DNA repair and recombination helicase PIF1; PIF1/RRM3 DNA helicase-like protein

Application Instructions

Application table	Application	Dilution	
	FACS	1 - 3 μg/10^6 cells	
	IHC-P	2-5 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	77 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.

Bioinformation

Gene Symbol	PIF1
Gene Full Name	PIF1 5'-To-3' DNA Helicase
Background	This gene encodes a DNA-dependent adenosine triphosphate (ATP)-metabolizing enzyme that functions as a 5' to 3' DNA helicase. The encoded protein can resolve G-quadruplex structures and RNA-DNA hybrids at the ends of chromosomes. It also prevents telomere elongation by inhibiting the actions of telomerase. Alternative splicing and the use of alternative start codons results in multiple isoforms that are differentially localized to either the mitochondria or the nucleus. [provided by RefSeq, Nov 2013]
Function	DNA-dependent ATPase and 5'-3' DNA helicase required for the maintenance of both mitochondrial and nuclear genome stability. Efficiently unwinds G-quadruplex (G4) DNA structures and forked RNA-DNA hybrids. Resolves G4 structures, preventing replication pausing and double-strand breaks (DSBs) at G4 motifs. Involved in the maintenance of telomeric DNA. Inhibits telomere elongation, de novo telomere formation and telomere addition to DSBs via catalytic inhibition of telomerase. Reduces the processivity of telomerase by displacing active telomerase from DNA ends. Releases telomerase by unwinding the short telomerase RNA/telomeric DNA hybrid that is the intermediate in the telomerase reaction. Possesses an intrinsic strand annealing activity. [UniProt]
Calculated Mw	77 kDa
PTM	Phosphoprotein. [UniProt]. [UniProt]
Cellular Localization	Nucleus; Mitochondrion. [UniProt]

Images



ARG45943 anti-PIF1 antibody IHC-P image

Immunohistochemistry: Human renal cancer stained with ARG45943 anti-PIF1 antibody at 2 $\mu\text{g}/\text{ml}$ dilution.



ARG45943 anti-PIF1 antibody WB image

Western blot: A431 stained with ARG45943 anti-PIF1 antibody at 0.5 $\mu g/ml$ dilution.



ARG45943 anti-PIF1 antibody FACS image

Flow Cytometry: Hela stained with ARG45943 anti-PIF1 antibody at 1 $\mu g/10^{4}6$ cells dilution.