

### ARG41441 anti-Ret antibody

Package: 100 μl Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes Ret	
Tested Reactivity	Hu, Ms, Rat	
Tested Application	ICC/IF, IHC-P, IP, WB	
Host	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Target Name	Ret	
Species	Human	
Immunogen	Synthetic peptide of Human Ret.	
Conjugation	Un-conjugated	
Alternate Names	RET51; CDHF12; HSCR1; Proto-oncogene c-Ret; PTC; Proto-oncogene tyrosine-protein kinase receptor Ret; RET-ELE1; CDHR16; MEN2B; MEN2A; MTC1; EC 2.7.10.1; Cadherin family member 12	

### **Application Instructions**

Application table	Application	Dilution	
	ICC/IF	1:50 - 1:200	
	IHC-P	1:50 - 1:200	
	IP	1:50	
	WB	1:500 - 1:2000	
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.		
Positive Control	SH-SY5Y		

### Properties

Form	Liquid	
Purification	Affinity purified.	
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.	
Preservative	0.02% Sodium azide	
Stabilizer	50% Glycerol	
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 -20°C. 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	RET		
Gene Full Name	ret proto-oncogene		
Background	This gene, a member of the cadherin superfamily, encodes one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This gene plays a crucial role in neural crest development, and it can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations in this gene are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma. Two transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their biological validity has not been confirmed. [provided by RefSeq, Jul 2008]		
Function	Receptor tyrosine-protein kinase involved in numerous cellular mechanisms including cell proliferation, neuronal navigation, cell migration, and cell differentiation upon binding with glial cell derived neurotrophic factor family ligands. Phosphorylates PTK2/FAK1. Regulates both cell death/survival balance and positional information. Required for the molecular mechanisms orchestration during intestine organogenesis; involved in the development of enteric nervous system and renal organogenesis during embryonic life, and promotes the formation of Peyer's patch-like structures, a major component of the gut-associated lymphoid tissue. Modulates cell adhesion via its cleavage by caspase in sympathetic neurons and mediates cell migration in an integrin (e.g. ITGB1 and ITGB3)-dependent manner. Involved in the development of the neural crest. Active in the absence of ligand, triggering apoptosis through a mechanism that requires receptor intracellular caspase cleavage. Acts as a dependence receptor; in the presence of the ligand GDNF in somatotrophs (within pituitary), promotes survival and down regulates growth hormone (GH) production, but triggers apoptosis in absence of GDNF. Regulates nociceptor survival and size. Triggers the differentiation of rapidly adapting (RA) mechanoreceptors. Mediator of several diseases such as neuroendocrine cancers; these diseases are characterized by aberrant integrins-regulated cell migration. [UniProt]		
Calculated Mw	124 kDa		
PTM	Autophosphorylated on C-terminal tyrosine residues upon ligand stimulation. Dephosphorylated by PTPRJ on Tyr-905, Tyr-1015 and Tyr-1062.		
	Proteolytically cleaved by caspase-3. The soluble RET kinase fragment is able to induce cell death. The extracellular cell-membrane anchored RET cadherin fragment accelerates cell adhesion in sympathetic neurons. [UniProt]		
Cellular Localization	Cell membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. [UniProt]		

#### Images

_	-	245			
_	-	140			
	-	98			
	-	72			
	-	55			
	-	36			
	-	24			
SH-SY5Y					

#### ARG41441 anti-Ret antibody WB image

Western blot: SH-SY5Y cell lysate stained with ARG41441 anti-Ret antibody.