

ARG82715 Human Ret ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82715-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82715-002	Standard	2 X 10 ng/vial	4°C
ARG82715-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82715-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82715-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82715-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82715-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82715-008	25X Wash buffer	20 ml	4°C
ARG82715-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82715-010	STOP solution	10 ml (Ready to use)	4°C
ARG82715-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82715 Human Ret ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Ret in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Ret
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	47 pg/ml
Sample Type	Serum, plasma (heparin) and cell culture supernatants.
Standard Range	93.8 - 6000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.0% Inter-Assay CV: 6.8%

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

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other 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]

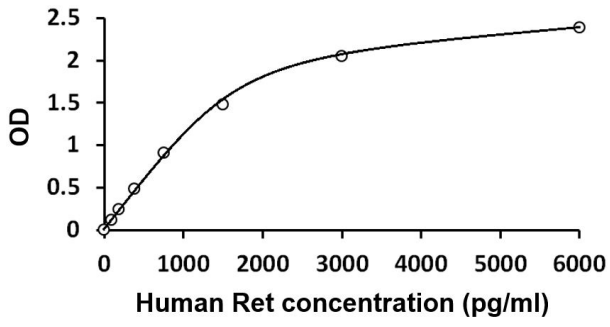
Function Receptor tyrosine-protein kinase involved in numerous cellular mechanisms including cell proliferation, neuronal navigation, cell migration, and cell differentiation upon binding with glial cell derived neurotrophic factor family ligands. Phosphorylates PTK2/FAK1. Regulates both cell death/survival 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]

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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]



ARG82715 Human Ret ELISA Kit standard curve image

ARG82715 Human Ret ELISA Kit results of a typical standard run with optical density reading at 450 nm.