HRP Conjugated Anti-Human c-Kit Antibody [PSH26-41] - Detector

HA724620H

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Det), ELISA
Clone number:	PSH26-41

Description: Proto-oncogene c-KIT is the gene encoding the receptor tyrosine kinase protein known as tyrosine-protein kinase KIT, CD117 (cluster of differentiation 117) or mast/stem cell growth factor receptor (SCFR). Multiple transcript variants encoding different isoforms have been found for this gene. KIT was first described by the German biochemist Axel Ullrich in 1987 as the cellular homolog of the feline sarcoma viral oncogene v-kit. KIT is a cytokine receptor expressed on the surface of hematopoietic stem cells as well as other cell types. Altered forms of this receptor may be associated with some types of cancer. KIT is a receptor tyrosine kinase type III, which binds to stem cell factor, also known as "steel factor" or "c-kit ligand". When this receptor binds to stem cell factor (SCF) it forms a dimer that activates its intrinsic tyrosine kinase activity, that in turn phosphorylates and activates signal transduction molecules that propagate the signal in the cell. After activation, the receptor is ubiquitinated to mark it for transport to a lysosome and eventual destruction. Signaling through KIT plays a role in cell survival, proliferation, and differentiation. For instance, KIT signaling is required for melanocyte survival, and it is also involved in haematopoiesis and gametogenesis.

Conjugate:	HRP-conjugated
Immunogen:	Recombinant protein within Human c-Kit aa 26-516 (HA211233).
Positive control:	Recombinant Human c-Kit protein (HA211233).
Subcellular location:	Cell membrane; Cytoplasm.
Database links:	SwissProt: P10721 Human

Recommended Dilutions:

ELISA(Det) **ELISA**	Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH26-40] to Human c-Kit (Capture) (HA724619) and Recombinant Human c-Kit protein (HA211233) as the standard. The reference range value is 23.44-3,000 pg/mL. Use at an assay dependent concentration.

Storage Buffer:	1*PBS (pH7.4), 0.1% BSA, 40% Glycerol, 0.2% Proclean 950.
Storage Instruction:	Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.
Purity:	Protein A affinity purified.

Images

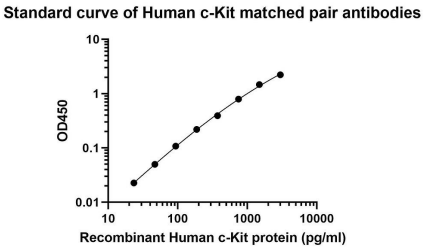


Fig1: Sandwich ELISA analysis of Human c-Kit matched pair antibodies

Capture: HA724619, Human c-Kit Rabbit mAb [PSH26-40]
Detector: HA724620, Human c-Kit Rabbit mAb [PSH26-41]

Elisa assay was performed by coating wells of a 96-well plate with 100 µl per well of capture antibody (HA724619) diluted in carbonate/bicarbonate buffer, at a concentration of 2 µg/mL overnight at 4℃. Wells of the plate were washed, blocked with 150 µl 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human c-Kit protein (HA211233) starting from 3,000 pg/mL to 0 pg/mL and detect antibody (HA724620, HRP, 0.2 µg/mL) for 1 hour at 30℃ with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Harris KS. et. al. CD117/c-kit defines a prostate CSC-like subpopulation driving progression and TKI resistance. Sci Rep. 2021 Jan
2. Russkamp NF. et. al. Anti-CD117 immunotherapy to eliminate hematopoietic and leukemia stem cells. Exp Hematol. 2021 Mar