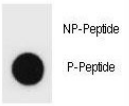
Phospho-c-Kit pS739 Antibody / Phospho-CD117 Antibody (F48709)

Catalog No.	Formulation	Size
F48709-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48709-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P05532
Applications	1:500
Limitations	This Phospho-c-Kit pS739 Antibody / Phospho-CD117 Antibody is available for research use only.



Phospho-c-Kit pS739 Antibody Phosphopeptide Specificity Dot Blot. Dot blot analysis of Phospho-c-Kit pS739 Antibody using 50 ng per dot of non-phosphorylated peptide (NP-Peptide) and c-Kit pS739 phosphopeptide (P-Peptide). A strong signal is detected with the phosphorylated peptide, while the corresponding non-phosphorylated peptide shows no appreciable signal. The clear discrimination between the matched peptide pair demonstrates phosphorylation-dependent recognition of the Ser739 epitope and supports the phospho-specificity of the Phospho-CD117 Antibody.

Description

Phospho-c-Kit pS739 Antibody / Phospho-CD117 Antibody recognizes KIT when phosphorylated at serine 739. KIT, also known as c-Kit, CD117 and the stem cell factor receptor, is a type III receptor tyrosine kinase involved in cellular proliferation, survival, differentiation and migration. Binding of stem cell factor promotes receptor dimerization and activation, initiating phosphorylation-dependent signaling through multiple intracellular pathways.

KIT contains an extracellular ligand-binding region, a single transmembrane segment and an intracellular split kinase

domain. Following ligand-induced activation, KIT undergoes phosphorylation at multiple residues that influence receptor activity, protein interactions and downstream signaling. These regulatory events connect KIT with pathways including PI3K/AKT and RAS/MAPK and allow cellular responses to stem cell factor to be precisely controlled.

Serine 739 lies within the intracellular region of KIT and represents a phosphorylation site distinct from the receptor's extensively studied regulatory tyrosine phosphorylation sites. Detection of phosphorylation at this residue allows the phosphorylated receptor population to be examined independently of total KIT abundance. A Phospho-CD117 Antibody can therefore complement total-protein measurements when investigating changes in receptor phosphorylation state and regulation.

KIT signaling has important roles in hematopoietic progenitor cells, mast cells, melanocytes and germ cells. Dysregulated KIT activity is also relevant to cancer biology, particularly in gastrointestinal stromal tumors and other malignancies involving abnormal KIT expression or activating mutations. Phosphorylation-specific detection provides an additional approach for investigating the regulation of this biologically important receptor.

NSJ Bioreagents offers this phospho-specific reagent for research into KIT regulation and stem cell factor receptor signaling. The Phospho-c-Kit pS739 Antibody terminology identifies both the receptor and targeted phosphorylation site, while Phospho-CD117 Antibody reflects the widely used cell-surface marker designation for KIT.

A Phospho-c-Kit pS739 Antibody provides a phosphorylation-specific reagent for investigating KIT phosphorylation at Ser739, while a Phospho-CD117 Antibody supports research into stem cell factor receptor regulation and signaling.

For a Protein Microarray Validated CD117 antibody with GIST IHC validation, see our CD117 Antibody C117/6347 / c-Kit Monoclonal Antibody.

Application Notes

Titration of the Phospho-c-Kit pS739 Antibody / Phospho-CD117 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-c-Kit pS739 Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS739 of mouse c-Kit.

Storage

Aliquot the Phospho-c-Kit pS739 Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-CD117 antibody, KIT pS739 antibody, Phospho-KIT antibody, Phospho-SCFR antibody, Phospho-Stem Cell Factor Receptor antibody

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