

KIT (Phospho-Tyr703) Antibody

Catalog No: #12017

Package Size: #12017-1 50ul #12017-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

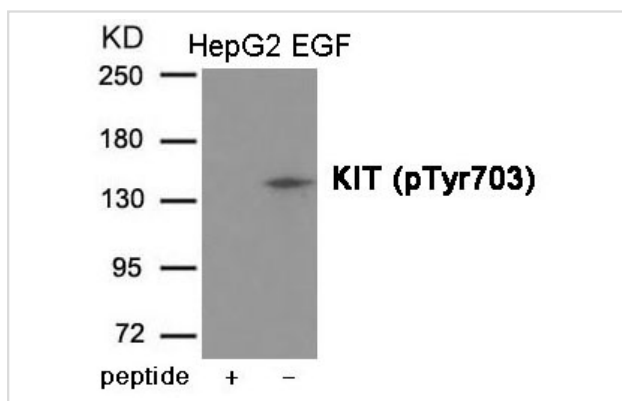
Product Name	KIT (Phospho-Tyr703) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of KIT only when phosphorylated at Tyrosine 703.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Tyrosine 703 (A-L-Y(p)-K-N) derived from Human KIT.
Target Name	KIT
Modification	Phospho
Other Names	PBT, SCFR, C-Kit, CD117
Accession No.	Swiss-Prot#: P10721; NCBI Gene#: 3815; NCBI Protein#: NP_000213.1
Uniprot	P10721
GeneID	3815;
SDS-PAGE MW	145kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Predicted MW: 145kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HepG2 cells treated with EGF using KIT (Phospho-Tyr703) Antibody #12017. The lane on the left is treated with the antigen-specific peptide.

Background

Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine KITLG/SCF and plays an essential role in the regulation of cell survival and proliferation, hematopoiesis, stem cell maintenance, gametogenesis, mast cell development, migration and function, and in melanogenesis. In response to KITLG/SCF binding, KIT can activate several signaling pathways. Phosphorylates PIK3R1, PLCG1, SH2B2/APS and CBL. Activates the AKT1 signaling pathway by phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase. Activated KIT also transmits signals via GRB2 and activation of RAS, RAF1 and the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1. Promotes activation of STAT family members STAT1, STAT3, STAT5A and STAT5B. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. KIT signaling is modulated by protein phosphatases, and by rapid internalization and degradation of the receptor. Activated KIT promotes phosphorylation of the protein phosphatases PTPN6/SHP-1 and PTPRU, and of the transcription factors STAT1, STAT3, STAT5A and STAT5B. Promotes phosphorylation of PIK3R1, CBL, CRK (isoform Crk-II), LYN, MAPK1/ERK2 and/or MAPK3/ERK1, PLCG1, SRC and SHC1.

Note: This product is for in vitro research use only