phospho c-Kit [pY721]. Rabbit Phosphorylation Site-Specific Antibody

**BACKGROUND**

c-Kit, also known as CD117 and stem cell factor receptor, is a 145 kDa transmembrane tyrosine kinase encoded by the c-Kit proto-oncogene. c-Kit acts to regulate a variety of biological responses including cell proliferation, apoptosis, chemotaxis and adhesion. Ligand binding to the extracellular domain leads to autophosphorylation on several tyrosine residues within the cytoplasmic domain, and activation. Mutations in c-Kit have been found to be important for tumor growth and progression in a variety of cancers including mast cell diseases, gastrointestinal stromal tumor, acute myeloid leukemia, Ewing sarcoma and lung cancer. Phosphorylation at tyrosine 721 of c-Kit allows binding and activation of PI3-kinase.

**IMMUNOGEN**

The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human c-Kit that contains tyrosine 721. (Mouse, Rat have 82% homology and are expected to work but have not been tested)

Peptide Competition and Stimulation Experiments prepared from Mo7e cells left untreated (1) or treated with 100 ng/mL human SCF for 5 minutes (2-5) were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. The membrane was blocked with a 5% BSA-TBST buffer overnight at 4°C, then incubated with the c-Kit [pY721] antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (1, 2), the non-phosphopeptide corresponding to the phosphopeptide immunogen (3), a generic phosphotyrosine-containing peptide (4), or the

**ORDERING INFORMATION**

**CATALOG NUMBER**

X2020P

**SIZE**

100 µl

**FORM**

Unconjugated

**HOST/CLONE**

Rabbit Clone Polyclonal

**FORMULATION**

Provided as solution in phosphate buffered saline, pH 7.3, with 1.0 mg/ml BSA, 50% glycerol and 0.05% sodium azide

**CONCENTRATION**

IgG

**APPLICATIONS**

Western Blot

**SPECIES REACTIVITY**

Human

**ACCESSION NUMBER**

Human P10721
Optimal concentration should be evaluated by serial dilutions. For Western blotting applications, we recommend using the antibody at a 1:1000 dilution.

**Purification**

Antigen Immunoaffinity Purification

**Ship Conditions**

Ship at ambient temperature, freeze upon arrival

**Storage Customer**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**Stability**

Products are stable for one year from purchase when stored properly.

**References**


**Product Specific References**