

Product datasheet for AM20333PU-N

OriGene Technologies, Inc.

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SRC (full length) Mouse Monoclonal Antibody [Clone ID: 5A18]

Product data:

Product Type: Primary Antibodies

Clone Name: 5A18

Applications: IHC, WB

Recommended Dilution: Immunohistochemistry on Paraffin Sections: 20 µg/ml.

Western Blot.

Reactivity: Human, Mouse, Rat

Host: Mouse

Clonality: Monoclonal

Immunogen: Recombinant full length Human c-Src

Specificity: This antibody recognizes Proto-Oncogene Protein Tyrosine Kinase SRC (SRC).

Formulation: PBS, pH 7.2 containing 50% Glycerol and 0.09% Sodium Azide as preservative

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Protein G Chromatography

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: SRC proto-oncogene, non-receptor tyrosine kinase

Database Link: Entrez Gene 20779 MouseEntrez Gene 83805 RatEntrez Gene 6714 Human

P12931





Background:

The SRC gene is similar to the v-src gene of Rous sarcoma virus. This proto-oncogene may play a role in the regulation of embryonic development and cell growth. Mutations in this gene could be involved in the malignant progression of colon cancer. The protein product is pp60vsrc, a cytoplasmic protein with tyrosine-specific protein kinase activity that associates with the cytoplasmic face of the plasma membrane. The protein consists of three domains, an N-terminal SH3 domain, a central SH2 domain and a tyrosine kinase domain. The SH2 and SH3 domains cooperate in the auto-inhibition of the kinase domain. c-Src is phosphorylated on an inhibitory tyrosine near the c-terminus of the protein. This produces a binding site for the SH2 domain which, when bound, facilitates binding of the SH3 domain to a low affinity polyproline site within the linker between the SH2 domain and the kinase domain. Binding of the SH3 domain results in misalignment of residues within the kinase domain's active site inactivating the enzyme. This allows for multiple mechanism for c-Src activation: dephosphorylation of the C-terminal tyrosine by a protein tyrosine phosphatase, binding of the SH2 domain by a competitive phospho-tyrosine residue, as seen in the case of c-Src binding to focal adhesion kinase, or competitive binding of a polyproline binding site to the SH3 domain, as seen in the case of the HIV NEF protein.

Synonyms: c-Src, pp60c-src

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Stem cell relevant signaling -

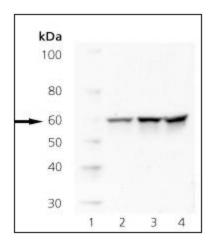
JAK/STAT signaling pathway

Protein Pathways: Adherens junction, Endocytosis, Epithelial cell signaling in Helicobacter pylori infection, ErbB

signaling pathway, Focal adhesion, Gap junction, GnRH signaling pathway, Tight junction,

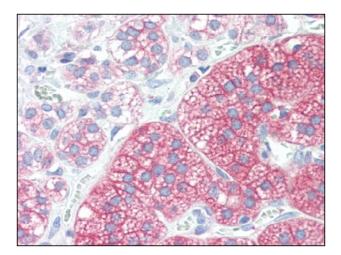
VEGF signaling pathway

Product images:

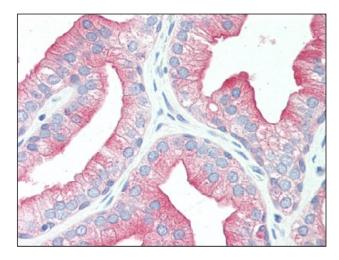


Lane 1: MW Marker Lane 2: HeLa Lane 3: 3T3 Lane 4: PC12





SRC antibody staining of Formalin-Fixed, Paraffin-Embedded Human Adrenal at 20 ug/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.



SRC antibody staining of Formalin-Fixed, Paraffin-Embedded Human Prostate at 20 ug/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.