

Product datasheet for AP20359PU-N

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OriGene Technologies, Inc.

FAK (PTK2) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of FAK protein.

Formulation: Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store 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.

Predicted Protein Size: ~ 125 kDa

Gene Name: protein tyrosine kinase 2

Database Link: Entrez Gene 14083 MouseEntrez Gene 25614 RatEntrez Gene 5747 Human

Q05397



Background:

Focal adhesion kinase (FAK) is a non receptor protein tyrosine kinase discovered as a substrate for Src and as a key element of integrin signaling. FAK plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. FAK regulation includes phosphorylation at multiple tyrosine and serine residues. Phosphorylation of tyrosine generally is associated with positive regulation and growth promotion, however, dephosphorylation at these sites occurs as cells enter mitosis (M-Phase of the cell cycle). In contrast, serine phosphorylation either remains high or is increased as cells enter mitosis and may play a role in focal adhesion disassembly.FAK and its phosphorylation states have been implicated in cancer metastasis and tumor cell survival and adhesion-independent growth. Additionally, recent evidence indicates that elevation of FAK activity in human carcinoma cells is associated with increased invasive potential. A central role in tumor formation and progression suggests that FAK is an attractive target for therapeutic intervention.

Synonyms: FAK, Focal adhesion kinase 1, FADK1, pp125FAK, Protein-tyrosine kinase 2

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Axon guidance, Chemokine signaling pathway, ErbB signaling pathway, Focal adhesion,

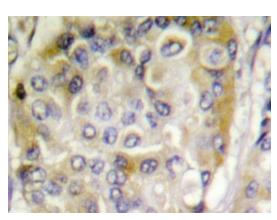
Leukocyte transendothelial migration, Pathways in cancer, Regulation of actin cytoskeleton,

Small cell lung cancer, VEGF signaling pathway

Product images:



Western blot analysis of FAK antibody (Cat.-No.: AP20359PU-N) in extracts from 293 cells.



Immunohistochemistry analyzes of FAK antibody (Cat.-No.: AP20359PU-N) in paraffin-embedded human breast carcinoma tissue.