

FAK recombinant protein

Recombinant FAK (409-698) protein

CATALOG #
AAA60153

HOST
Baculovirus

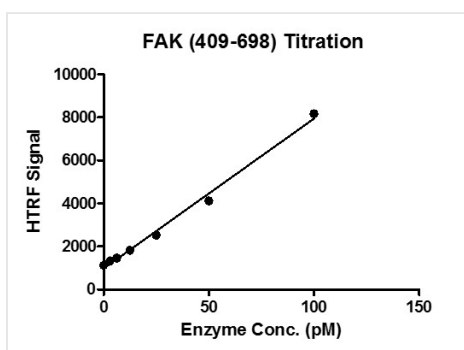
PRODUCT SYNONYMS

FAK; Recombinant FAK (409-698) protein; PTK2; FADK; FAK1; FRNK; PPP1R71; p125FAK; pp125FAK; FAK recombinant protein

PRODUCT SPECIFICATIONS

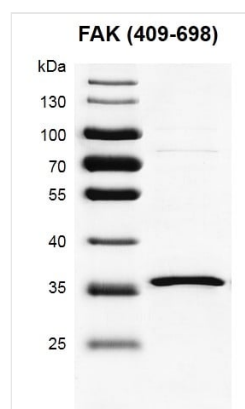
Host	Baculovirus
Form/Format	Recombinant FAK (409-698) protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5mM TCEP.
Protein Species	Human
Tag	DYKDDDDK-Tag
Notes	This protein is suitable for use in binding assays, inhibitor screening, and selectivity profiling. Kinase Activity Assay Conditions: 1uM TK substrate was incubated with different concentrations of FAK (409-698)protein in a 10ul reaction system containing 1X Enzymatic Buffer, 5mM MgCl ₂ , 1mM DTT, 5mM SEB and 100uM ATP for 1 hour. The 10ul detection reagents containing TK antibody and SA-XL665, each of which was 1:100 diluted with 1X Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature, and HTRF KinEASE TK assay was used to detect the enzymatic activity.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

HTRF assay for FAK (409-698) activity 1 uM TK substrate was incubated with different concentrations of FAK protein and 100 uM ATP in the reaction buffer for 1 hour. The detection reagents were added and incubated with the reactions for 1 hr. TK antibody was used to detect the products. All the operations and reactions were performed at room temperature, and HTRF KinEASE TK assay was used to detect the enzymatic activity.



SDS-PAGE

Recombinant FAK (409-698) protein gel 10% SDS-PAGE Coomassie staining MW: 34.8 kDa
Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for FAK recombinant protein	Short Description: Recombinant FAK (409-698) protein includes amino acids 409-698 of human FAK protein (accession number NP_722560.1); it was expressed in a baculovirus expression system with an N-terminal DYKDDDDK tag. The molecular weight of the protein is 34.8 kDa. This protein is suitable for use in binding assays, inhibitor screening, and selectivity profiling. Background: FAK (Focal Adhesion Kinase 1), also known as PTK2 (Protein Tyrosine Kinase 2), is a non-receptor protein-tyrosine kinase that plays an essential role in regulating cell migration, adhesion, spreading, reorganization of the actin cytoskeleton, formation and disassembly of focal adhesions and cell protrusions, cell cycle progression, cell proliferation and apoptosis. It is required for early embryonic development and placenta development, embryonic angiogenesis, normal cardiomyocyte migration and proliferation and normal heart development. FAK regulates axon growth and neuronal cell migration, axon branching and synapse formation, and it is required for normal development of the nervous system. It also plays a role in osteogenesis and differentiation of osteoblasts. FAK can function in integrin signal transduction, but also in signaling downstream of numerous growth factor receptors, G-protein coupled receptors (GPCR), EPHA2, netrin receptors and LDL receptors. It can form multisubunit signaling complexes with SRC and SRC family members upon activation; this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. FAK also can regulate numerous signaling pathways, promote activation of phosphatidylinositol 3-kinase and the AKT1 signaling cascade, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling cascade. It can recruit the ubiquitin ligase MDM2 to p53/TP53 in the nucleus, and thereby regulates p53/TP53 activity, p53/TP53 ubiquitination and proteasomal degradation.
Product Categories/Family for FAK recombinant protein	Recombinant Proteins ; Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	24476013
NCBI GeneID	5747
NCBI Accession #	NP_722560.1
NCBI GenBank Nucleotide #	NM_153831.3
UniProt Accession #	Q05397; Q14291; Q8IYN9; Q9UD85; B4E2N6; F5H4S4; J3QT16
Molecular Weight	114,253 Da
NCBI Official Full Name	focal adhesion kinase 1 isoform a
NCBI Official Synonym Full Names	protein tyrosine kinase 2
NCBI Official Symbol	PTK2
NCBI Official Synonym Symbols	FAK; FADK; FAK1; FRNK; PPP1R71; p125FAK; pp125FAK
NCBI Protein Information	focal adhesion kinase 1
UniProt Protein Name	Focal adhesion kinase 1
UniProt Gene Name	PTK2
UniProt Synonym Gene Names	FAK; FAK1; FADK 1; FRNK; PPP1R71
UniProt Entry Name	FAK1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.