

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human FAK when phosphorylated at Y397.
Source	Monoclonal Rat IgG _{2A} Clone # 820755
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Phosphopeptide containing the human FAK Y397 site Accession # Q05397
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Focal adhesion kinase 1 (FAK) is a ubiquitously expressed non-receptor protein tyrosine kinase that is concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. This cellular localization is directed by a "Focal Adhesion Targeting" (FAT) sequence, a 125 amino acid sequence at the C-terminus. FAK plays an important role in migration, cell spreading, differentiation, cytoskeleton protein phosphorylation, apoptosis and acceleration of the G1 to S phase transition of the cell cycle. It associates with several different signaling proteins such as Src-family PTKs, p130Cas, Shc, Grb2, PI 3-kinase, and paxillin. This enables FAK to function within a network of integrin-stimulated signaling pathways leading to the activation of targets such as the ERK and JNK/mitogen-activated protein kinase pathways. FAK is also linked to oncogenes at biochemical and functional levels. Increased expression and/or activity of FAK in various tumors has been correlated with enhanced migration and invasiveness of human tumor cells in addition to promoting increased cell proliferation.

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