

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                             |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human FAK when phosphorylated at S843 in direct ELISAs and Western blots. |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 743101                                  |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                        |
| <b>Immunogen</b>                                                                                                                                                                                        | Phosphopeptide containing the human FAK S843 site<br>Accession # Q05397           |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm   |
| <b>Formulation</b>                                                                                                                                                                                      | 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

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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.

## PRODUCT SPECIFIC NOTICES

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