**BACKGROUND**

Focal adhesion kinase was initially identified as a major substrate for the intrinsic protein tyrosine kinase activity of Src encoded pp60. The deduced amino acid sequence of FAK p125 has shown it to be a cytoplasmic protein tyrosine kinase whose sequence and structural organization are unique as compared to other proteins described to date. Localization of p125 by immunofluorescence suggests that it is primarily found in cellular focal adhesions leading to its designation as focal adhesion kinase (FAK). FAK is concentrated at the basal edge of only those basal keratinocytes that are actively migrating and rapidly proliferating in repairing burn wounds and is activated and localized to the focal adhesions of spreading keratinocytes in culture. Thus, it has been postulated that FAK may have an important *in vivo* role in the reepithelialization of human wounds. FAK protein tyrosine kinase activity has also been shown to increase in cells stimulated to grow by use of mitogenic neuropeptides or neurotransmitters acting through G protein-coupled receptors.

**CHROMOSOMAL LOCATION**

Genetic locus: PTK2 (human) mapping to 8q24.3; Ptk2 (mouse) mapping to 15 D3.

**SOURCE**

FAK (H-1) is a mouse monoclonal antibody raised against amino acids 903-1052 of FAK of mouse origin.

**PRODUCT**

Each vial contains 200 μg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

FAK (H-1) is available conjugated to either phycoerythrin (sc-1688 PE), Alexa Fluor® 546 (sc-1688 AF546) or Alexa Fluor® 594 (sc-1688 AF594), 200 μg/ml, for WB (RGB), IF, IHC(P) and FC; and to either Alexa Fluor® 680 (sc-1688 AF680) or Alexa Fluor® 790 (sc-1688 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FC.

**APPLICATIONS**

FAK (H-1) is recommended for detection of FAK p125 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μg per 100-500 μg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μg per 1 x 10⁶ cells).


Molecular Weight of FAK: 125 kDa.

Positive Controls: FAK (h): 293T Lysate: sc-114600, Jurkat whole cell lysate: sc-2204 or Ramos cell lysate: sc-2216.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

![Western blot analysis of FAK expression](image1)

![Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes](image2)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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