

PRODUCT INFORMATION

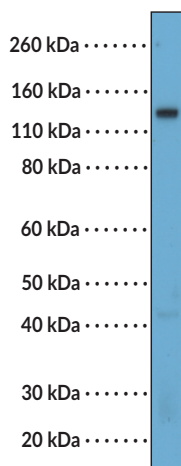
FAK1 Rabbit Monoclonal Antibody (Clone RM472)

Item No. 42837

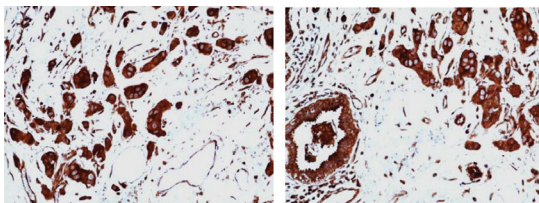
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	FADK1, Focal Adhesion Kinase 1, p125FAK, pp125FAK, Protein-Tyrosine Kinase 2, PTK2
Immunogen:	A peptide corresponding to residues surrounding Tyr397 of human FAK1
Cross Reactivity:	(+) FAK1
Species Reactivity:	(+) Human, mouse, rat
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM472
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for IHC is 1:100-1:200 and 1:100-1:400 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

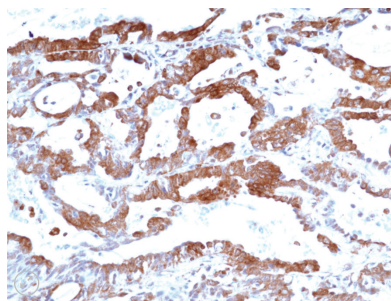
Images



WB of HEK293 cell lysates using FAK1 Rabbit Monoclonal Antibody (Clone RM472) at a dilution of 1:100.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human breast cancer tissue sections using FAK1 Rabbit Monoclonal Antibody (Clone RM472) at a dilution of 1:100.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human lung cancer tissue sections using FAK1 Rabbit Monoclonal Antibody (Clone RM472) at a dilution of 1:100.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Focal adhesion kinase 1 (FAK1) is a non-receptor tyrosine kinase and adaptor protein.^{1,2} It is composed of an N-terminal FERM domain, a proline-rich region, a catalytic domain, two additional proline-rich regions, and a C-terminal focal adhesion-targeting (FAT) domain, which can also be autonomously expressed as FAK-related nonkinase (FRNK) and act as an inhibitor of FAK activity.^{3,4} FAK is ubiquitously expressed and localizes to focal adhesion sites at the plasma membrane, as well as the cytoplasm and nucleus.^{2,3,5} It is activated by autophosphorylation of Tyr397, which recruits c-Src to initiate signaling through PI3K/Akt or MAPK/ERK pathways, and is involved in integrin signaling, cell adhesion, migration, and survival.^{1,2} Overexpression of FAK is associated with various cancers and metastasis.^{1,6} Cayman's FAK1 Rabbit Monoclonal Antibody (Clone RM472) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Katoh, K. Signal transduction mechanisms of focal adhesions: Src and FAK-mediated cell response. *Front. Biosci. (Landmark Ed.)* **29(11)**, 392 (2024).
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4. Koshman, Y., Kim, T., Chu, M., et al. FRNK inhibition of focal adhesion kinase-dependent signaling and migration in vascular smooth muscle cells. *Arterioscler. Thromb. Vasc. Biol.* **30(11)**, 2226-2233 (2010).
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6. Parsons, J.T., Slack-Davis, J., Tilghman, R., et al. Focal adhesion kinase: Targeting adhesion signaling pathways for therapeutic intervention. *Clin. Cancer Res.* **14(3)**, 627-632 (2008).

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