

Product datasheet for **AM00059PU-N**

FAK (PTK2) pTyr397 (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 2D11]

Product data:

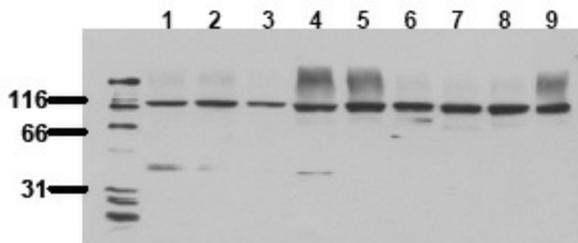
Product Type:	Primary Antibodies
Clone Name:	2D11
Applications:	ELISA, WB
Recommended Dilution:	ELISA: 0.1 µg/ml. Western Blot: 0.5 µg/ml for HRPO/ECL detection. Recommended Blocking buffer: Casein/Tween 20 based blot incubation buffer (AS00002BU-N or-L). Included Positive Control: Cell lysate from untreated HepG2 cells: Format: Lyophilized cell lysate from serum starved HepG2 cells. Reconstitution Restore by addition of 200 µl H ₂ O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min. Applications: The positive control cell lysate is recommended for immunoblot applications. 20 µl of positive control cell lysate correspond to ca. 80.000 cells. Use 20 µl / lane (mini gel) for HRPO/ECL detection of the target proteins. Please note: The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation. Storage: In aliquots at -20°C. Avoid repeated freezing and thawing.
Reactivity:	Canine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic phosphopeptide conjugated to KLH. Epitope: Phosphotyrosine 397
Specificity:	This antibody specifically recognizes FAK phosphorylated at Tyrosine 397.
Formulation:	1 ml 2 x PBS / 0.09% Sodium Azide / PEG and Sucrose. State: Purified State: Lyophilized purified IgG fraction.
Reconstitution Method:	Restore with 1 ml H ₂ O (15 min, RT).
Purification:	Subsequent Thiophilic Adsorption and Size Exclusion Chromatography.



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Conjugation:	Unconjugated
Storage:	Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze in liquid nitrogen) at -80°C. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	120 kDa
Gene Name:	protein tyrosine kinase 2
Database Link:	Entrez Gene 5747 Human Q05397
Background:	<p>Focal adhesion kinase (FAK) is a non receptor protein tyrosine kinase discovered as a substrate for Src and as a key element of integrin signaling. FAK plays a central role in cell spreading, differentiation, migration, cell death and acceleration of the G1 to S phase transition of the cell cycle. FAK regulation includes phosphorylation at multiple tyrosine and serine residues. Phosphorylation of tyrosine generally is associated with positive regulation and growth promotion, however, dephosphorylation at these sites occurs as cells enter mitosis (M-Phase of the cell cycle). In contrast, serine phosphorylation either remains high or is increased as cells enter mitosis and may play a role in focal adhesion disassembly. FAK and its phosphorylation states have been implicated in cancer metastasis and tumor cell survival and adhesion-independent growth. Additionally, recent evidence indicates that elevation of FAK activity in human carcinoma cells is associated with increased invasive potential. A central role in tumor formation and progression suggests that FAK is an attractive target for therapeutic intervention.</p> <p>Activation of FAK leads to autophosphorylation of tyrosine 397 within the kinase activation loop and subsequent phosphorylation of tyrosine residues 407, 576, 577, 861, and 925.</p>
Synonyms:	FAK, Focal adhesion kinase 1, FADK1, pp125FAK, Protein-tyrosine kinase 2

Product images:



Detection of endogenous FAK: Whole cell lysates of serum starved tumor cells (20,000 cells per lane) were applied to SDS-PAGE and transferred to PVDF membranes. Immunoblots were probed with mab AM00059PU-N (0.5 ug/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec). Lane 1: HeLa Lane 2: HepG2 Lane 3: HEK293 Lane 4: SH-SY5Y Lane 5: MDCK Lane 6: PC12 Lane 7: CMT 93 Lane 8: Neuro 2A Lane 9: 3T3