

ProQinase™ FAK aa411-686

protein tyrosine kinase 2

Recombinant Human Active Protein Kinase

HGNC Symbol: PTK2

Synonyms: FADK, FADK1, FRNK, FAK1, PPP1R71, pp125FAK

Product No.: 0480-0000-6

Lot: 009

Description: Human FAK, internal (kinase domain) fragment, amino acids S₄₁₁-Q₆₈₆ (as in [NCBI/Protein](#) entry NP_722560.1), untagged, expressed in Sf9 insect cells

Product identity: FAK 411-686 Lot 009, has been verified by mass spectrometry LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 31807 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20 % glycerol

Storage temperature: -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10 µl are not advisable. Avoid repeated freeze-thaw cycles!

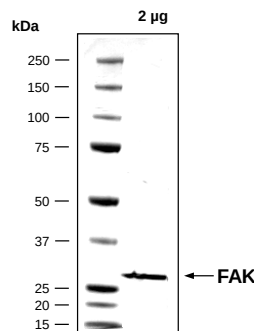
Protein concentration: 1.075 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

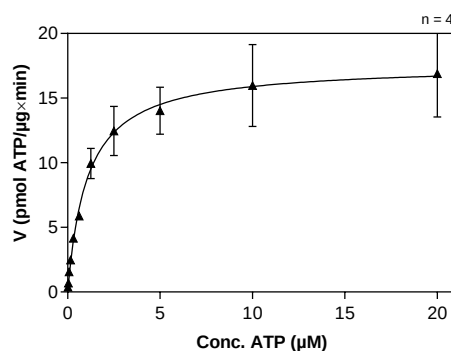
Specific kinase activity (P_i transfer): 18 pmol/µg*min

ATP-K_M: 1.1 µM

FAK aa411-686 Lot 009:
Coomassie stain



FAK aa411-686 Lot 009:
Determination of V_{max} and K_M value for ATP



- Assay conditions:
 - 60 mM HEPES-NaOH, pH 7.5
 - 3 mM MgCl₂
 - 3 mM MnCl₂
 - 3 µM Na-orthovanadate
 - 1.2 mM DTT
 - 50 µg/ml PEG_{20,000}
 - ATP (variable)
 - Substrate: Poly(Glu:Tyr)_{4:1} 10 µg/ml
 - Kinase: 4 µg/ml

Assay technology:
Radiometric filter binding assay
MSFC membrane (96 well plate, Millipore)

Sequence information

FAK aa411-686 Recombinant Protein Amino Acid Sequence

1	GAMSTRDYEI	QRERIELGRC	IGEGQFGDVH	QGIYMSPENP	ALAVAIAKTC	NCTSDSVREK	60
61	FLQEALTMRO	FDHPHIVKLI	GVITENPVWI	IMELCTLGEL	RSFLQVRKYS	LDLASLILYA	120
121	YQLSTALAYL	ESKRFBVHRDI	AARNVLVSSN	DCVKLGDFGL	SRYMEDSTYY	KASKGKLPK	180
181	WMAPEINFR	RFTSASDVWM	FGVCMWEILM	HGVKPFQGVK	NNDVIGRIEN	GERLPMPPNC	240
241	PPTLYSLMTK	CWAYDPSRRP	RFTTELKAQLS	TILEEEKAQ			300

1-3: legacy of tag cleavage blue: FAK fragment

FAK wt¹ Amino Acid Sequence

1	MAAAYLDPNL	NHTPNSSTKT	HLGTGMERSP	GAMERVLKVF	HYFESNSEPT	TWASIIRHGD	60
61	ATDVRGIIQK	IVDSHKVKHV	ACYGFRLSHL	RSEEVHWLHV	DMGVSSVREK	YELAHPPPEW	120
121	KYELRIRYLP	KGFLNQFTED	KPTLNFFYQQ	VKSDYMLEIA	DQVDQEIALK	LGCLEIRRSY	180
181	WEMRGNALEK	KSNYEVLKED	VGLKRFFPKS	LLDSVKAKTL	RKLIQQTFRQ	FANLNREESI	240
241	LKFFEILSPV	YRFDKECFKC	ALGSSWIIISV	ELAIGPEEGI	SYLTDKGCNP	THLADFTQVQ	300
301	TIQYSNSEDK	DRKGMLQLKI	AGAPEPLTVT	APSLTIAENM	ADLIDGYCRL	VNGTSQSFI	360
361	RPQKEGERAL	PSIPKLANSE	KQGMRTHAVS	VSETDDYAEI	IDEEDTYTMP	STRDYEIQRE	420
421	RIELGRCIGE	GQFGDVHQGI	YMSPENPALA	VAIKTCNKCT	SDSVREKFLQ	EALTMROFDH	480
481	PHIVKLIGVI	TENPVWIIME	LCTLGELRSF	LQVRKYSLDL	ASLILYAYQL	STALAYLESK	540
541	RFVHRDIAAR	NVLVSSNDCV	KLGDGFLSRY	MEDSTYYKAS	KGKLPKWKMA	PESINFRFRFT	600
601	SASDVWMFGV	CMWEILMHGV	KPFQGVKNND	VIGRIENGER	LPMPNCPPT	LYSLMTKCWA	660
661	YDPSRRPRFT	ELKAQLSTIL	EEKAQQEER	MRMESRRQAT	VSWDSGGSDE	APPKPSRPGY	720
721	PSPRSSEGFY	PSPQHMVQTN	HYQVSGYPGS	HGITAMAGSI	YPGQASLLDQ	TDSWNHRPQE	780
781	IAMWQPNVED	STVLDLRGIG	QVLPHTLMEE	RLIRQQQEME	EDQRWLEKEE	RFLKPDVRLS	840
841	RGSIDREDGS	LQGPIGNQHI	YQPVGKPDPA	APPKKPPRPG	APGHLGSLAS	LSSPADSYNE	900
901	GVKLQPQEIS	PPPTANLDRS	NDKVYENVTG	LVKAVIEMSS	KIQPAPPEEY	VPMVKEVGLA	960
961	LRTLLATVDE	TIPLLPASTH	REIEMAQKLL	NSDLGELINK	MKLAQQYVMT	SLQQEYKKQM	1020
1021	LTAHAHALAVD	AKNLLDVIDQ	ARLKMVGQTR	PH			1080

blue: FAK sequence expressed in recombinant protein

¹[NCBI/Protein](#) accession number NP_722560.1