

ProQinase™ FYN Y531F

FYN proto-oncogene, Src family tyrosine kinase

Recombinant Human Active Protein Kinase

HGNC Symbol: FYN

Synonyms: p59-Fyn, SLK, SYN, c-Fyn

Product No.: 1457-0000-1

Lot: 003

Description: Human FYN, full length, amino acids M₁-L₅₃₇ (as in [NCBI/Protein](#) entry NP_002028.1) with a Y531F mutation, N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: FYN Y531F Lot 003, was confirmed as FYN by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 89,020 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, 15 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 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.128 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

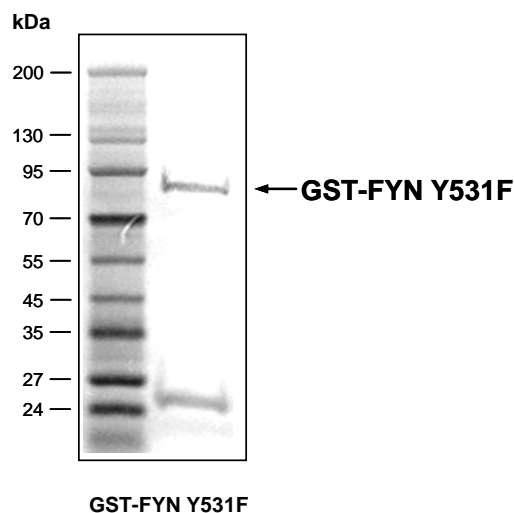
Biochemical Parameters:

Specific kinase activity (P_i transfer): 28 pmol/µg × min
ATP-K_M: 1.7 µM

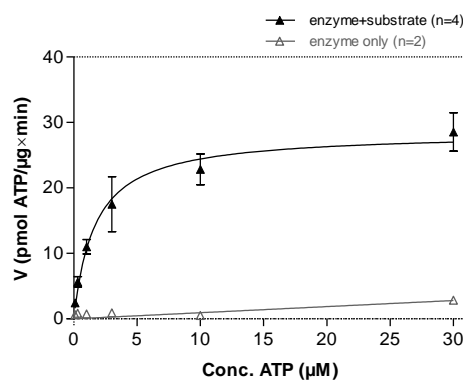
Additional assay technology:

FYN Y531F Lot 003 was also successfully tested by Reaction Biology for the use with the ADP-Glo™ Kinase assay from Promega ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

FYN Y531F Lot 003: Coomassie stain



FYN Y531F Lot 003: 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(E/Y)4:1 20 µg/ml
Kinase: 1 µg/ml
- Filter binding assay
MSFC membrane (Millipore)

ProQinase™ FYN Y531F

Product No.: 1457-0000-1

GST-FYN Y531F Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDKVLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMG HHHHHG	RRRASVAAGI	240
241	LVPRGS PGLD	GICSRNS MGC	VQCKDKEATK	LTEERDGS LN	QSSGYRYGTD	PTPQHYP SFG	300
301	VTSIPNYN NF	HAAGGQGL TV	FGVNSSS HT	GTLRTRG GTG	VTLFVALY DY	EARTEDD LSF	360
361	HKGEKFQ ILN	SSEG DWEAR	SLTTG ETGYI	PSNYV APVDS	IQAE EWFYFK	LGRKDA ERQL	420
421	LSFGN PRGTF	LIRE SETTKG	AYSLS IRDWD	DMKGD HVKHY	KIRKLD NGGY	YITTRA QFET	480
481	LQQLV QHYSE	RAAGL CCLRV	VPCHK GMPRL	TDLSV KTVDV	WEIP RESLQL	IKRLG NGQFG	540
541	EVW MGTWNGN	TKVA IKTLKP	GTMS PESFLE	EAQ IMKKLKH	DKLV QLYAVV	SEEP IYIVTE	600
600	YM NKGSLLDF	LKD GEGRALK	LPNL VDMAAQ	VAAG MAYIER	MNYI HRDLRS	ANIL VGNGLI	660
661	CKI ADFLGAR	LIED NEYTAR	QGA KFPKWIT	APEA ALYGRF	TIK SDVWSFG	ILL TELVTKG	720
721	RVP YPGMNNR	EVLE QVERGY	RMPC PQDCPI	SLHE LMHCW	KKD PEERPTF	EYL QSFLDY	780
781	FTATE PE Q FQ	GENL					840

1-218: GST **Red**: HIS6-tag **Pink**: Thrombin cleavage site **blue**: FYN **boxed**: Y531F

FYN wt ¹ Amino Acid Sequence							
1	MGC VQCKDKE	ATK LTEERDG	SLN QSSGYRY	GTD PTPQHYP	SFG VTSIPNY	NNF HAAGGQG	60
61	LTV FGGVNSS	SHT GTLRTRG	GTG VTLFVAL	YD EARTEDD	LSF HKGEKFQ	ILN SSEGDDW	120
121	EAR SLTTGET	GYI PSNYVAP	VDSI QAEWY	FGK LGRKDAE	RQL LSFGNPR	GTFL IRESET	180
181	TKG AYLSIR	DWD DMGDHV	KHY KIRKLDN	GGY ITTRAQ	FET LQQLVQH	YSE RAAGLCC	240
241	RLV VVCHKGM	PRL TDLSVKT	KDV WEIPRES	LQL IKRLGNG	QF GEVVMGTW	NGN TKVAIKT	300
301	LKP GTMSPE	FLEE AQIMKK	LKH DKLVQLY	AV SEEPYI	VTE YMNKGS	LDF LKDGEGR	360
361	ALK LPNLVDM	AAQ VAAGMAY	IERM NYIHRD	LRS ANILVGN	GLI CKIADFG	LAR LIEDNEY	420
421	TAR QGA K FPI	KWT APEAALY	GRF TIKSDVW	SFG ILLTEL	TKG RVPYPM	NNR EVLEQVE	480
481	RGY RMPC Q D	CPIS LHELMI	HCW KDPEER	PTFE YLSFL	EDY FTATEPQ	YQ PGENL	540

blue: FYN sequence expressed in recombinant protein **Red**: variant in recombinant protein

¹[NCBI/Protein](#) accession number NP_002028.1