

ProQinase™ YES

v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1

Recombinant Human Active Protein Kinase

HGNC Symbol: YES1

Synonyms: HsT44

Product No.: 0362-0000-1

Lot: 001

Description: Human YES, full length, amino acids M₁-L₅₄₃ (as in NCBI/Protein entry NP_005424.1), N-terminal GST-HIS₆ fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: YES Lot 001, was confirmed as YES by specific western blotting using anti-YES antibody

Theoretical MW_{Fusion Protein}: 90,997 Da

Expression: Baculovirus infected Sf9 cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM TRIS-HCL pH 8.0, 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20% glycerol

Storage temperature: -80°C

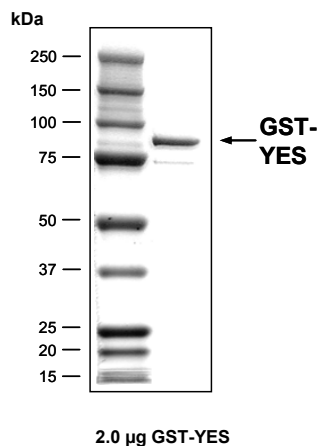
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.116 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

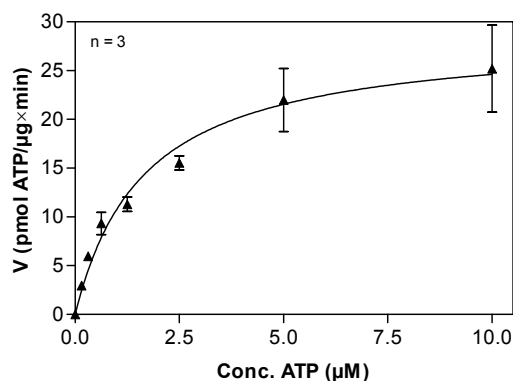
Biochemical Parameters:

Specific kinase activity (P_i transfer): 29 pmol/µg×min
ATP-K_M: 1.7 µM

YES Lot 001:
Coomassie stain



YES Lot 001:
Determination of V_{max} and K_M value for ATP



Determination of K_M value & Specific activity:

- 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}, 20 µg/ml
 - Kinase: 1.0 µg/ml
- Filter binding assay
 - MSFC membrane (Millipore)

Additional assay technology: YES Lot 001

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



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YES Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGQATF	GGGDHPPKSD	PMGHHHHHG	RRRASVAAGI	240
241	LVPRGSPGLD	GIYARGIQAS	MGCIKSKENK	SPAIKYRPEN	TPEPVSTSVS	HYGAEPTTVS	300
301	PCPSSSAKGT	AVNFSSLSMT	PFGGSSGVTP	FGGASSFSV	VPSSYPAGLT	GGVTIFVALY	360
361	DYEARTTEDL	SFKKGERFQI	INNTEGDWWE	ARSIATGKNG	YIPSNYVAPA	DSIQAEWYF	420
421	GKMRKDAER	LLLNPQNQRG	IFLVRESETT	KGAYSLSIRD	WDEIRGDNVK	HYKIRKLDNG	480
481	GYIITTRAQF	DTLQKLVKHY	TEHADGLCHK	LTTVCPTVKP	QTQGLAKDAW	EIPRESLRLE	540
541	VKLGQCGFGE	VWMGTWNGTT	KVAIKTLKPG	TMMPEAFLQE	AQIMKKLRHD	KLVPLYAVVS	600
601	EEPIYIVTEF	MSKGSLLDFL	KEGDGKYLKL	PQLVDMAAQI	ADGMAYIERM	NYIHRDLRAA	660
661	NILVGENLVC	KIADFGLARL	IEDNEYTARQ	GAKFPIKWTA	PEAALYGRFT	IKSDVWSFGI	720
721	LQTELVTKGR	VPYPGMVNRE	VLEQVERGYR	MPCPQGCPES	LHELMNLCWK	KDPDERPTFE	780
781	YIQSFLEDYF	TATEPQYQPG	ENL				840

1-218: GST **Red:** HIS6-tag **Pink:** Thrombin cleavage site **blue:** YES

YES wt ¹ Amino Acid Sequence							
1	MGCIKSKENK	SPAIKYRPEN	TPEPVSTSVS	HYGAEPTTVS	PCPSSSAKGT	AVNFSSLSMT	60
61	PFGGSSGVTP	FGGASSFSV	VPSSYPAGLT	GGVTIFVALY	DYEARTTEDL	SFKKGERFQI	120
121	INNTEGDWWE	ARSIATGKNG	YIPSNYVAPA	DSIQAEWYF	GKMRKDAER	LLLNPQNQRG	180
181	IFLVRESETT	KGAYSLSIRD	WDEIRGDNVK	HYKIRKLDNG	GYIITTRAQF	DTLQKLVKHY	240
241	TEHADGLCHK	LTTVCPTVKP	QTQGLAKDAW	EIPRESLRLE	VKLGQCGFGE	VWMGTWNGTT	300
301	KVAIKTLKPG	TMMPEAFLQE	AQIMKKLRHD	KLVPLYAVVS	EEPIYIVTEF	MSKGSLLDFL	360
361	KEGDGKYLKL	PQLVDMAAQI	ADGMAYIERM	NYIHRDLRAA	NILVGENLVC	KIADFGLARL	420
421	IEDNEYTARQ	GAKFPIKWTA	PEAALYGRFT	IKSDVWSFGI	LQTELVTKGR	VPYPGMVNRE	480
481	VLEQVERGYR	MPCPQGCPES	LHELMNLCWK	KDPDERPTFE	YIQSFLEDYF	TATEPQYQPG	540
541	ENL						600

blue: YES sequence expressed in fusion protein

¹NCBI/Protein accession number NP_005424.1

Recombinant Proteins