Shanghai VKEY Biotechnologies Co., Ltd.
Adds: 3F, Building 2, 898 Halei Road,
Pudong New District, Shanghai, P. R. China
Website: www.vkeybio.com

Certificate of Analysis（CoA）

1. Product Information

Description	**KeyTec® BARK1, N-GST; C-Strep II**		
CAT.	P1HI0162S/P1HI0162L	**Size**	10 μg/100 μg
LOT.	ABW01SA	**Storage Condition**	-80 ℃
Validity Period	Up to 1 year from date of receipt, when stored and handled as recommended. And avoid repeated freeze-thaws cycles.		

2. Protein description

KeyTec® BARK1 recombinant protein with a N-terminal GST tag and a C-terminal Strep II tag, was purified using Strep II affinity purification. This BARK1 recombinant protein batch has high activity in ADP-Glo assay.

3. Physical Characteristics

AA Sequences	Uniprot: P25098, M1-L689(end)
Tag	N-terminal GST tag, C-terminal Strep II tag
Molecular Weight	106.6 kDa
Species	Human
Expression Host	*Sf9*
Protein Concentration	0.81 mg/mL by OD_{280}
Purity	>95% by SDS-PAGE
Form	Liquid
Formulation	50 M Tris, 150 mM NaCl, 1 mM DTT, 10% Glycerol, pH7.5

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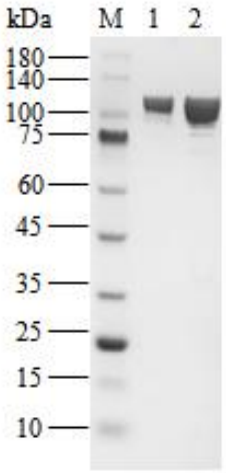
4. Quality Control

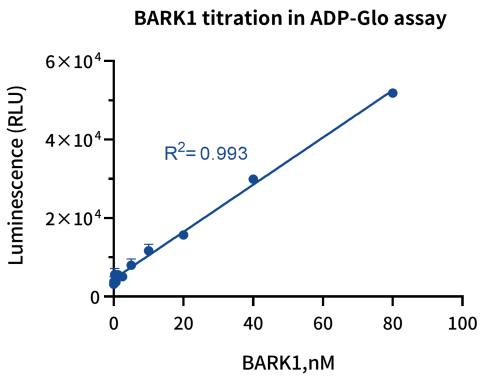
A: SDS-PAGE

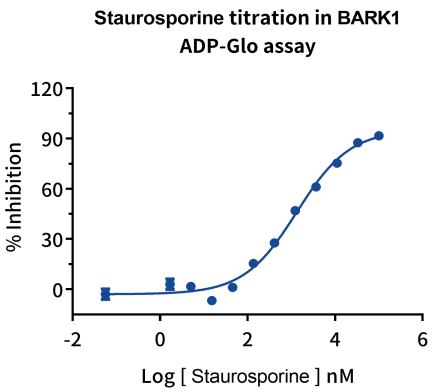


M MW Standard
1 1 μg BARK1
2 3 μg BARK1

B: BARK1 titration

This BARK1 recombinant protein was verified using the ADP-Glo assay and showed high enzymatic activity. The enzymatic reaction was performed by incubating BARK1 protein, ATP, and substrate at 25 ℃ for 60 minutes, followed by the ADP-Glo Kinase Assay measures ADP formed from the enzymatic reaction. The luminescent signal was measured using the Chemiluminescent module of a microplate reader.





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5. Primary Sequence

Primary Sequence for BARK1

Green: GST; Red: Strep II; Black: BARK1

1	MSPILGYWKI KGLVQPTRLL LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID	60
61	GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV	120
121	DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK	180
180	KRIEAIPQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD GSMADLEAVL ADVSYLMAME	240
241	KSKATPAARA SKKILLPEPS IRSVMQKYLE DRGEVTFEKI FSQKLGYLLF RDFCLNHLEE	300
301	ARPLVEFYEE IKKYEKLETE EERVARSREI FDSYIMKELL ACSHPFSKSA TEHVQGHLGK	360
361	KQVPPDLFQP YIEEICQNLR GDVFQKFIES DKFTRFCQWK NVELNIHLTM NDFSVHRIIG	420
421	RGGFGEVYGC RKADTGKMYA MKCLDKKRIK MKQGETLALN ERIMLSLVST GDCPFIVCMS	480
481	YAFHTPDKLS FILDLMNGGD LHYHLSQHGV FSEADMRFYA AEIILGLEHM HNRFVVYRDL	540
541	KPANILLDEH GHVRISDLGL ACDFSKKKPH ASVGTHGYMA PEVLQKGVAY DSSADWFSLG	600
601	CMLFKLLRGH SPFRQHKTKD KHEIDRMTLT MAVELPDSFS PELRSLLEGL LQRDVNRRLG	660
661	CLGRGAQEVK ESPFFRSLDW QMVFLQKYPP PLIPPRGEVN AADAFDIGSF DEEDTKGIKL	720
721	LDSDQELYRN FPLTISERWQ QEVAETVFDT INAETDRLEA RKKAKNKQLG HEEDYALGKD	780
781	CIMHGYMSKM GNPFLTQWQR RYFYLFPNRL EWRGEGEAPQ SLLTMEEIQS VEETQIKERK	840
841	CLLLKIRGGK QFILQCDSDP ELVQWKKELR DAYREAQQLV QRVPKMKNKP RSPVVELSKV	900
901	PLVQRGSANG LGSWSHPQFE K	960