

Certificate of Analysis (CoA)

1. Product Information

Description	KeyTec® BRSK2, N-GST; C-Strep II		
CAT.	P1HI0171S/P1HI0171L	Size	10 µg/100 µg
LOT	ABW01SA	Storage Condition	-80 °C
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

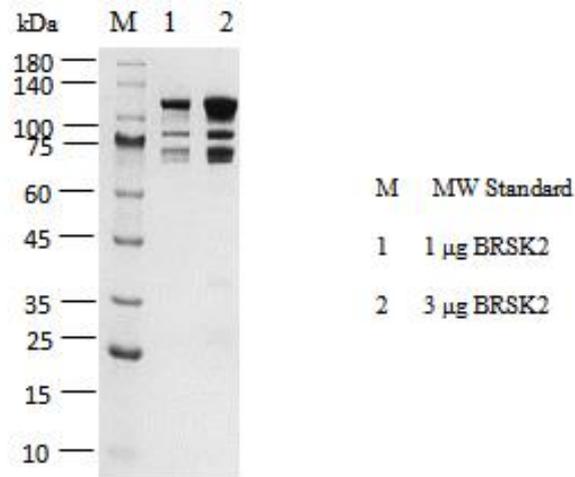
KeyTec® BRSK2, N-GST; C-Strep II recombinant protein with a GST tag at the N-terminus and a Strep II tag at the C-terminus. The protein was purified using GST affinity purification. This BRSK2 protein batch has high enzymatic activity in the ADP-Glo assay.

3. Physical Characteristics

AA Sequences	Uniprot: Q8IWQ3-2, M1-L674(end)
Tag	N-terminal GST tag, C-terminal Strep II tag
Molecular Weight	103 kDa
Species	Human
Expression Host	<i>Sf9</i>
Purity	0.57 mg/mL by OD ₂₈₀
Protein Concentration	>65% by SDS-PAGE
Form	Liquid
Formulation	50 M Tris, 150 mM NaCl, 1 mM DTT, 10% glycerol, pH7.5

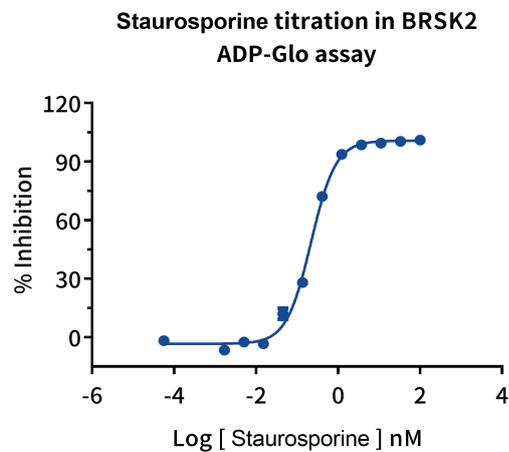
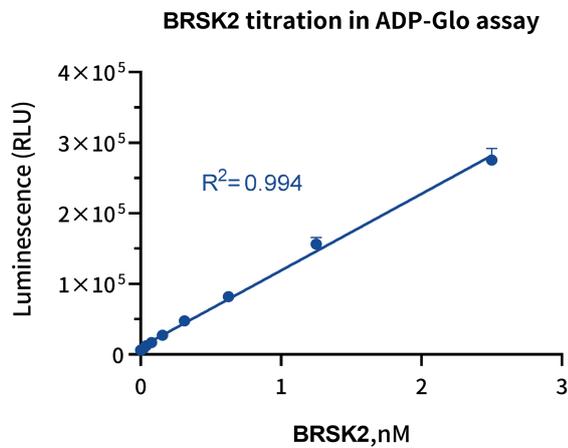
4. Quality Control

A: SDS-PAGE



B: BRSK2 titration

This BRSK2 recombinant protein was verified using the ADP-Glo assay and showed high enzymatic activity. The enzymatic reaction was performed by incubating BRSK2 protein, ATP, and substrate at 25 °C 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.



5. Primary Sequence

Primary Sequence for BRSK2

Green: GST; Red: 3C protease; Blue: Strep II tag; Black: BRSK2

1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
180	KRIEAIPQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	GSLEVL FQGP	MTSTGKD GGA	240
241	QHAQYVGPYR	LEKTLGKGQT	GLVKLGVHCV	TCQKVAIKIV	NREKLSESVL	MKVEREIAIL	300
301	KLIEHPHVLK	LHDVYENKKY	LYLVLEHVS G	GELFDYLVKK	GRLTPKEARK	FFRQIISALD	360
361	FCHSHSICHR	DLKPENLLLD	EKNNIRIADF	GMASLQVGDS	LLETSCGSPH	YACPEVIRGE	420
421	KYDGRKADVW	SCGVILFALL	VGALPFDDDN	LRQLLEKVKR	GVFHMHPHFIP	PDCQSLLRGM	480
481	IEVDAARRLT	LEHIQKHIWY	IGGKNEPEPE	QPIPRKVQIR	SLPSLEDIDP	DVLDSMHS LG	540
541	CFRDRNKLLQ	DLLSEENQE	KMIYFLLDR	KERYPSQEDE	DLPPRNEIDP	PRKRVDSPML	600
601	NRHGKRRPER	KSMEVLSVTD	GGSPVPARRA	IEMAQH GQRS	RSISGASSGL	STSPLSSPRV	660
661	TPHPSPRGSP	LPTPKGTPVH	TPKESPAGTP	NPTPPSSPSV	GGVPWRARLN	SIKNSFLGSP	720
721	RFHRRKLQVP	TPEEMSNLTP	ESSPELAKKS	WFGNFISLEK	EEQIFVVIKD	KPLSSIKADI	780
781	VHAFLSIPSL	SHSVISQTSF	RAEYKATGGP	AVFQKPVKFQ	VDITYTEGGE	AQKENGIYSV	840
841	TFTLLSGPSR	RFKRVVETIQ	AQLLSTHDPP	AAQHLSEPPP	PAPGLSWGAG	LKGQKVATSY	900
901	ESSLGSWSHP	QFEK					960