

## ProQinase™ NDR2

serine/threonine kinase 38 like

Recombinant Human Active Protein Kinase

HGNC Symbol: STK38L

Synonyms: KIAA0965

Product No.: 1776-0000-1

Lot: 001

**Description:** Human NDR2, full length, amino acids M<sub>1</sub>-L<sub>464</sub> (as in [NCBI/Protein](#) entry NP\_055815.1), N-terminal GST-HIS<sub>6</sub> fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

**Product identity:** NDR2 Lot 001, was confirmed as Kinase by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW<sub>Fusion Protein</sub>:** 82,092 Da

**Expression host:** Sf9 insect cells

**Purification:** GST-Affinity Chromatography

**Activation:** By co-expression with MOB1B

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

### Biochemical Parameters:

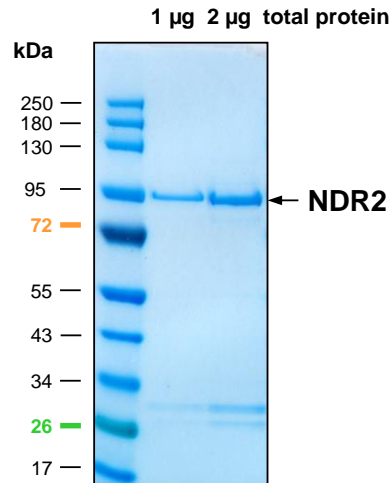
Specific kinase activity (P<sub>i</sub> transfer): 1.6 pmol/µg × min

ATP-K<sub>M</sub>: 4 µM

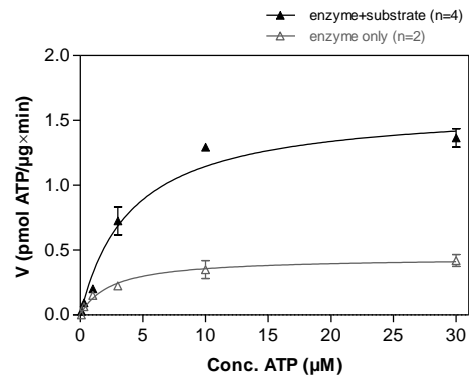
### Additional assay technology:

NDR2 Lot 001 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

### NDR2 Lot 001: Coomassie stain



### NDR2 Lot 001: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



- Assay conditions:  
60 mM HEPES-NaOH, pH 7.5  
3 mM MgCl<sub>2</sub>  
3 mM MnCl<sub>2</sub>  
3 µM Na-orthovanadate  
1.2 mM DTT  
50 µg/ml PEG<sub>20,000</sub>  
ATP (variable)  
Substrate: RBER-GSK3 40 µg/ml  
Kinase: 4 µg/ml
- Filter binding assay  
MSFC membrane (Millipore)

## NDR2

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GST-NDR2 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFCG	240
241	PMAMTAGTTT	TFPMSNHTRE	RVTVAKLTLE	NFYSNLILQH	EERETRQKKL	EVAMEEEGLA	300
301	DEEKKLRRSQ	HARKETEFRL	LKRTRLGLDD	FESLKVIGRG	AFGEVRLVQK	KDTGHIYAMK	360
361	ILRKSDMLEK	EQVAHIRAER	DILVEADGAW	VVKMFYSFQD	KRNLYLIMEF	LPGGDMMTLL	420
421	MKKDTLTEEE	TQFYISETVL	AIDAIHQ LGF	IHRDIKPDNL	LLDAKGHVKL	SDFGLCTGLK	480
481	KAHRTEFYRN	LTHNPPSDFS	FQNMNSKRKA	ETWKKRRRQL	AYSTVGTPDY	IAPEVFMQTG	540
541	YNKLCDWWSL	GVIMYEM LIG	YPPFCSETPQ	ETYRKVMNWK	ETLVFPPEVP	ISEKAKDLIL	600
601	RFCIDSENRI	GNSGVEEIKG	HPFFEGVDWE	HIRERPA AIP	IEIKSIDDTS	NFDDFPESDI	660
661	LQVPVNTTEP	DYKSKDWVFL	NYTYKRF EGL	TQRGSIPTYM	KAGKL		720

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: NDR2

NDR2 wt <sup>1</sup> Amino Acid Sequence							
1	MAMTAGTTTT	FPMNSHTRE	VTVAKLTLEN	FYSNLILQHE	ERETRQKKLE	VAMEEEGLAD	60
61	EEKKLRRSQH	ARKETEFRL	KRTRLGLDDF	ESLKVIGRGA	FGEVRLVQKK	DTGHIYAMKI	120
121	LRKSDMLEKE	QVAHIRAERD	ILVEADGAWV	VVKMFYSFQDK	RNLYLIMEFL	PGGDMMTLLM	180
181	KKDTLTEEET	QFYISETVLA	IDAIHQ L GFI	HRDIKPDNLL	LDAGHVKLS	DFGLCTGLKK	240
241	AHRTEFYRNL	THNPPSDFS	FQNMNSKRKAE	TWKKNRRQLA	YSTVGTPDYI	APEVFMQTGY	300
301	NKLCDWWSLG	VIMYEM LIGY	PPFCSETPQE	TYRKVMNWKE	TLVFPPEVPI	SEKAKDLILR	360
361	FCIDSENRI	GNSGVEEIKGH	HPFFEGVDWEH	IRERPA A IPI	EIKSIDDTSN	FDDFPESDIL	420
421	QVPVNTTEPD	YKSKDWVFLN	YTYKRF EGLT	QRGSIPTYMK	AGKL		480

blue: NDR2 sequence expressed in recombinant protein

<sup>1</sup>[NCBI/Protein](https://www.ncbi.nlm.nih.gov/protein/55815) accession number NP\_055815.1