

ProQinase™ ERK7 (non activated)

mitogen-activated protein kinase 15

Recombinant Human Active Protein Kinase

HGNC Symbol: MAPK15

Synonyms: ERK8, MAPK15

Product No.: 1106-0000-1

Lot: 001

Description: Human ERK7, N-terminal fragment, amino acids M₁-R₃₅₄ (as in NCBI/Protein entry NP_620590.2), N-terminal 4xFLAG-tag sequence and C-terminal HIS₈-fusion protein, expressed in Sf9 insect cells

Product identity: ERK7 Lot 001, was confirmed as ERK7 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 46,156 Da

Expression: Baculovirus infected Sf9 cells

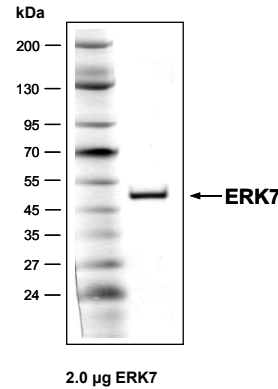
Purification: Immobilized Metal Affinity Chromatography

Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20% glycerol

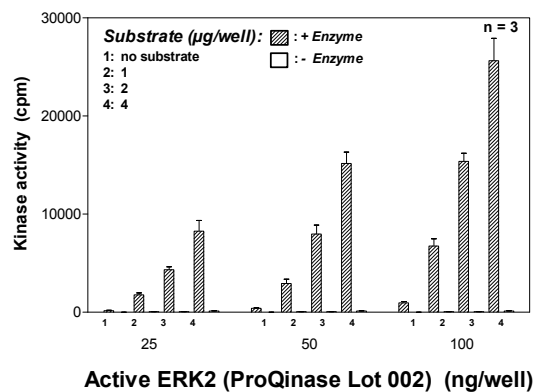
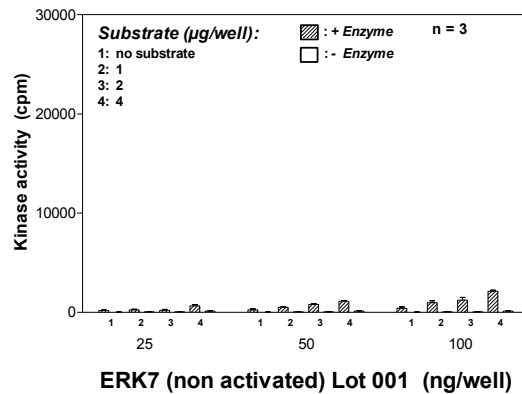
Storage temperature: -80°C
Avoid repeated freeze-thaw cycles!

Protein concentration: 0.563 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

ERK7 Lot 001: Coomassie stain



Kinase activity ERK7 (inactive) vs active ERK7:



Final assay concentrations:

- 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}
- 1 µM ATP (610,000 cpm ³³P-γ-ATP)
- Substrate (variable): RB-CTF
- Recombinant ERK7 (inactive) or active ERK7 (variable)

Assay: ³³PanQinase® Assay

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ERK7 Recombinant Fusion Protein Amino Acid Sequence								
1	MDYKDDDDKD	YKDDDDKDYK	DDDDKDYKDD	DDKSGGGS	MC	TVVDPRIVRR	YLLRRQLGQG	60
61	AYGIVWKA	VD	RRTGEVVAIK	KIFDAFRDKT	DAQRTFREIT	LLQEFGDHPN	IISLLDVIRA	120
121	ENDRDIYLVF	EFMDTDLNAV	IRKGGLLQDV	HVRSIFYQLL	RATRFLHSGH	VVHRDQKPSN		180
181	VLLDANCTVK	LCDFGLARSL	GDLPEGPEDQ	AVTEYVATRW	YRAPEVLLSS	HRYTLGVMW		240
241	SLGCILGEML	RGRPLFPGTS	TLHQLELILE	TIPPPSEEDL	LALGSGCRAS	VLHQLGSRPR		300
301	QTLDALLPPD	TSPEALDLLR	RLLVFAPDKR	LSATQALQHP	YVQRFHCPSD	EWAREADVPR		360
361	RAHEGVQLSV	PEYRSRVYQM	IIECGSSGT	SRKLL	EHHHH	HHHH		420

PINK: 4xFLAG-tag Red: HIS6-tag blue: ERK7 fragment

ERK7 wt ¹ amino acid sequence							
1	MCTVVDPRIV	RRYLLRRQLG	QGAYGIVWKA	VDRRTGEVVA	IKKIFDAFRD	KTDAQRTFRE	60
61	ITLLQEFGDH	PNIIISLLDVI	RAENDRDIYL	VFEFMDTDLN	AVIRKGGLLQ	DVHVRSIFYQ	120
121	LLRATRFLHS	GHVVHRDQKP	SNVLLDANCT	VKLCDFGLAR	SLGDLPEGPE	DQAVTEYVAT	180
181	RWYRAPEVLL	SSHRYTLGVD	MWSLGCILGE	MLRGRPLFPG	TSTLHQLELI	LETIPPPSEE	240
241	DLLALGSGCR	ASVLHQLGSR	PRQTLDALLP	PDTSPEALDL	LRRLLVFAPD	KRLSATQALQ	300
301	HPYVQRFHCP	SDEWAREADV	RPRAEHGVQL	SVPEYRSRVY	QMILECGSS	GTSREKGPEG	360
361	VSPSQAHLHK	PRADPQLPSR	TPVQGPRPRP	QSSPGHDPAE	HESPRAAKNV	PRQNSAPLLQ	420
421	TALLNGNERP	PGAKEAPPLT	LSLVKPSGRG	AAPSLTSQAA	AQVANQALIR	GDWNRGGGVR	480
481	VASVQQVPPR	LPPEARPGRR	MFSTSALQGA	QGGARALLGG	YSQAYGTVCH	SALGHLPLLE	540
541	GHHV						600

blue: ERK7 sequence expressed in fusionprotein

¹NCBI/Protein accession number NP_620590.2

Recombinant Proteins