

Materials List for

Nuclear Magnetic Resonance Spectroscopy to Identify Multiple Phosphorylations in Proteins

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Materials

Name	Company	Catalog Number	Comments
pET15B recombinant T7 expression plasmid	Novagen	69257	Keep at -20°C
BL21(DE3) transformation-competent E.coli bacteria	New England Biolabs	C25271	Keep at -80°C
Autoclaved LB Broth, Lennox	DIFCO	240210	Bacterial Growth Medium
MEM vitamin complements 100X	Sigma	58970C	Bacterial Growth Medium Supplement
¹⁵ N, ¹³ C-ISOGRO complete medium powder	Sigma	608297	Bacterial Growth Medium Supplement
¹⁵ NH ₄ Cl	Sigma	299251	Isotope
¹³ C-Glucose	Sigma	389374	Isotope Keep at 4°C
Protease inhibitor tablets	Roche	5056489001	1 tablet in 1ml is 40X solution that can be kept at -20°C
DNaseI	EUROMEDEX	1307	Keep at -20°C
Homogenizer (EmulsiFlex-C3)	AVESTIN		Lysis is realized at 4°C
Pierce™ Unstained Protein MW Marker	Pierce	266109	
Active human MEK1 kinase, GST-Tagged	Sigma	M8822	Keep at -80°C
AKTÄ Pure chromatography system	GE Healthcare		FPLC
HiTrap SP Sepharose FF (5 mL column)	GE Healthcare	17-5156-01	Cation exchange chromatography columns
HiPrep 26/10 Desalting	GE Healthcare	17-5087-01	Protein Desalting column
PD MidiTrap G-25	GE Healthcare	28-9180-08	Protein Desalting column
Tris D11, 97% D	Cortecnet	CD4035P5	Deuterated NMR buffer
5 mm Symmetrical Microtube SHIGEMI D2O (set of 5 inner & outerpipes)	Euriso-top	BMS-005B	NMR Shigemi Tubes
eVol kit-electronic syringe starter kit	Cortecnet	2910000	Pipetting
Bruker 900MHz AvanceIII with a triple resonance cryogenic probehead	Bruker		NMR spectrometer for data acquisition
Bruker 600MHz DMX600 with a triple resonance cryogenic probehead	Bruker		NMR spectrometer for data acquisition