

MRC PPU REAGENTS

Standard Operating Procedure

Preparation of MINDY2 [241 - 504]

Enzyme description:- MINDY2 [241 – 504]

Clone number:- DU 55390

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Sepharose

Calculated molecular mass:-

Monoisotopic 58, 144.20 daltons

Average Mass 58, 182.02 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 4.97

Purity:- >80 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.02 % Brij-35, 0.2 mM PMSF, 1 mM Benzamidine.

Storage temperature:- -70 deg C

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Clone Data Sheet

MINDY2 [241 – 504]

<u>Protein</u>	MINDY2 [241 – 504]
<u>Clone number</u>	DU 55390
<u>Species</u>	Human
<u>Accession number</u>	Q8NBR6.3
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	<p>MAPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFEL GLEFPNLPYYIDGDVCLTQSMAIRYIADKHNMLGGCPKERAIEISMLE GAVLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLN GDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPOIDKY LKSSKYIAWPLQGWQATFGGGDHPKSDLVPRGSLEVLFGPLGSPEF MSVYHIKWIQWKEENTPIITQNGPCPLLAILNVLLAWKVKLPPMM EIIITAEQLMEYLGDYMLDAKPKEISEIQRLNIEQNMSDAMAILHKLQT GLDVNVRFTGVRVFEYTPPECIVFDLLDIPLYHGWLVDPQIDDIVKAVG NCSYNQLVEKIIISCKQSDNSELVSEGFVAEQFLNNTATQLTYHGLCEL TSTVQEGELCVFFRNNHFSTMTKYKGQLYLLVTDQGFLTEEKVVWESL HNVDGDGNFCDFEFHLRPPSDPETV</p>
<u>Native sequence</u>	<p>Amino acids S241 – V504 (L621 end residue) of human MINDY2. Residue S242 of the fusion protein is equivalent to S241 of the native enzyme. The GST tag is located at residues 1 – 220.</p>
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 – 228
<u>Cloning sites</u>	<i>Eco</i> R1 and <i>Not</i> I sites of pGEX6P-1

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Nucleotide Sequence Of Insert

gaattcatgTCTGTGTATCACATCAAGTGGATCCAGTGGAAAGGAAGAGAACACACCCATCATCAC
CCAGAATGAGAACGGACCCTGCCCCTTGCTGGCCATCCTCAATGTTTTGCTCCTGGCCTGGAAGG
TGAAACTTCCACCGATGATGGAAATCATAACTGCTGAGCAGCTGATGGAATATTTAGGAGATTAC
ATGCTTGATGCAAAGCCAAAAGAAATTCAGAAATTC AACGTTTAAATTATGAACAGAATATGAG
TGATGCCATGGCAATTTTGCACAAACTACAGACAGGCCTGGATGTAAATGTAAGATTCACTGGTG
TTCGAGTGTTTGAATATACACCAGAATGCATAGTATTTGATCTTCTTGATATTCCTTTGTACCAT
GGGTGGTTAGTAGACCCTCAGATTGATGACATTGTAAAAGCTGTTGGTAACTGCAGCTACAACCA
ACTAGTGGAGAAGATCATCTCTTGTAACAGTCAGACAATAGTGAGCTGGTTAGTGAAGGCTTTG
TAGCTGAGCAGTTTCTAAATAACACAGCCACTCAACTGACATACCATGGATTATGTGAACCTAACT
TCAACGGTTCAGGAAGGAGAACTTTGTGTGTTCTTTCGGAATAATCATTTTAGCACCATGACCAA
ATACAAGGGTCAACTGTATTTGTTGGTAACGGACCAGGGGTTCTTACTGAAGAGAAAAGTTGTTT
GGGAAAGCCTACACAACGTAGATGGTGATGGAAATTTCTGTGACTCAGAATTCATCTTCGACCT
CCTTCAGATCCTGAAACTGTAtaagcggccgc