

AR51344PU-S

Human MCM7 (1-414, His-tag) - Purified

Alternate names:

CDC47, CDC47 homolog, DNA replication licensing factor MCM7, MCM2, P1.1-MCM3, minichromosome maintenance complex component 7

Quantity:

0.1 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

MCM7 is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. The MCM complex consisting of this protein and MCM2, 4 and 6 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. Cyclin D1-dependent kinase, CDK4, is found to associate with this protein, and may regulate the binding of this protein with the tumorsuppressor protein RB1/RB.

Uniprot ID:

[P33993](#)

NCBI:

[NP_877577](#)

GeneID:

[4176](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >85% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol

Description:

Recombinant human MCM7 protein, fused to His-tag at N-terminus, was expressed in E.coli.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGSMVATYT CDQCGAETYQ PIQSPTFMPL IMCPSQECQT
NRSGGRLYLQ TRGSRFIKQ EMKMQEHSQ VPVGNIPRSI TVLVEGENTR IAQPGDHVS
TGIFLPILRT GFRQVVQGLL SETYLEAHRI VKMNKSEDE SGAGELTREE LRQIAEEDFY
EKLAASIAPE IYGHEDVKA LLLLLVGGVD QSPRGMKIRG NINICLMGDP GVAKSQLLSY
IDRLAPRSQY TTGRGSSGVG LTAAVLRDSV SGELTLEGA LVLADQGVCC IDEFDKMAEA
DRTAIHEVME QQTISIAGAG ILTTLNARCS ILAAANPAYG RYNPRRSLEQ NIQLPAALLS
RFDLLWLIQD RPDNDLRL AQHITYVHQH SRQPPSQFEP LDMKLMRRII AMCREKQPMV
PESLADYITA AYVEMRR

Molecular weight: 48.6 kDa (437aa)

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

Zhou,Y.M., et al. (2012) Liver Int. 32 (10), 1505-1509

Liu,Y.Z., et al. (2012) Lung Cancer 77 (1), 176-182

Pictures:

