Recombinant Protein Technical Manual

Recombinant Human MAD2L1/MAD2 Protein (His Tag)

RPES1890

Product Data:

Product SKU: RPES1890

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: Q13257

Protein Information:

Molecular Mass: 25.6 kDa

AP Molecular Mass: 28 kDa

Tag: N-His

Bio-activity:

Purity: > 96 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 20% glycerol, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HSMAD2;MAD2

Immunogen Information:

Sequence: Met 1-Asp 205

Background:

Mitotic spindle assembly checkpoint protein MAD2A, also known as HsMAD2, Mitotic arrest deficient 2-like protein 1, MAD2-like protein 1, MAD2L1 and MAD2, is a nucleus and cytoplasm protein which belongs to the MAD2 family. MAD2L1 is a component of the spindle-assembly checkpoint that prevents the onset of anaphase until all chromosomes are properly aligned at the metaphase plate. MAD2L1 is required for the execution of the mitotic checkpoint which monitors the process of kinetochore-spindle attachment and inhibits the activity of the anaphase promoting complex by sequestering CDC20 until all chromosomes are aligned at the metaphase plate. MAD2L1 has two highly different native conformations, an inactive open conformation that cannot bind CDC20 and that predominates in cytosolic monomers, and an active closed conformation. MAD2L1 in the closed conformation preferentially dimerizes with another molecule in the open conformation, but can also form a dimer with a molecule in the closed conformation. Formation of a heterotetrameric core complex containing two molecules of MAD1L1 and of MAD2L1 in the closed conformation promotes binding of another molecule of MAD2L1 in the open conformation and the conversion of the open to the closed form, and thereby promotes interaction with CDC20.