



Product Data Sheet

Cat # RP-666

Recombinant Human Casein Kinase 2 alpha

Size: 3 ug

10 ug

Synonyms:

Casein kinase II subunit alpha, EC 2.7.11.1, CK II, CK2A1, CKII alpha, CSNK2A1, PKCK2, CSK21.

Introduction:

The Casein kinase 2 (EC2.7.11.1) is a serine/threonine-selective protein kinase that is a tetramer of two alpha subunits and two beta subunits. The alpha subunits have the catalytic kinase domain. Casein kinase 2 has been implicated in cell cycle control, DNA repair, regulation of the circadian rhythm and other cellular processes. Casein kinase 2 activity has been reported to be activated following Wnt signaling pathway activation. A Pertussis toxin-sensitive G protein and Dishevelled appear to be an intermediary between Wnt-mediated activation of the Frizzled receptor and activation of casein kinase 2.

Mice that lack casein kinase 2 alpha prime have a defect in the morphology of developing sperm.

Description:

Casein Kinase 2 alpha Human Recombinant is a non-glycosylated polypeptide having a molecular mass of 45.1 kDa. Casein Kinase 2 is purified by proprietary chromatographic techniques.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered clear solution.

Formulation:

CK2a (0.4 mg/ml) is supplied in 25mM Tris-HCl, 500mM NaCl, 1mM DTT, 500µM PMSF, 50% glycerol, pH 8.5.

Storage Conditions:

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time.

Avoid multiple freeze-thaw cycles.

Unit Definition:

No protease activity detectable, specific activity > 1.320 U/mg (1U = 1µmol/min at 37 degree C) using the synthetic peptide RRRDDDSDDD.

Purity:

Greater than 99% as determined by SDS-PAGE.

Usage:

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 µl water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage.

Rev. 80311H