

## Datasheet

### CHEK2 monoclonal antibody (M01), clone 4B7

**Catalog Number:** H00011200-M01

**Regulatory Status:** For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against a full length recombinant CHEK2.

**Clone Name:** 4B7

**Immunogen:** CHEK2 (AAH04207.1, 1 a.a. ~ 543 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Sequence:**

MSRES DVEAQQSHGSSACSQPHGSVTQSQGSSSSQS  
QGSSSSTSTMPNSSQSSHSSSGTLSSLETVSTQELYS  
IPEDQEPEDQEPEEPTAPWARLWALQDGFANLECV  
NDNYWFGGRDKSCEYCFDEPLLKRTDKYRTYSKKHFRI  
FREVGPKNSYIAYIEDHSGNGTFVNTLVGKGRRPLN  
NNSIALSLSRNKVFVFFDLTVDDQSVYPKALRDEYIM  
SKTLGSGACGEVKLAFERKTCKKVAIKIISKRFKAIGSA  
READPALNVETEIEILKLNHPCIIKKNFFDAEDYYIVLE  
LMEGGELFDKVVGNKRLKEATCKLYFYQMLLAVQYLH  
ENGIHRDLKPENVLLSSQEEDCLIKITDFGHKILGETS  
LMRTLCTPTYLPEVLVSVGTAGYNRAVDCWLSLGLVI  
LFICLSGYPPFSEHRTQVSLKDQITSGKYNFIPEVWAE  
VSEKALDLVKLLVDPKARFTTEELRHPWLQDEDM  
KRKFQDLLSEENESTALPQVLAQPSTSRKRPREGEAE  
GAETTKRPAVCAAVL

**Host:** Mouse

**Reactivity:** Human

**Applications:** ELISA, IF, IHC-P, S-ELISA, WB-Ce, WB-Re

(See our web site product page for detailed applications information)

**Protocols:** See our web site at <http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Isotype:** IgG2a Kappa

**Storage Buffer:** In 1x PBS, pH 7.4

**Storage Instruction:** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 11200

**Gene Symbol:** CHEK2

**Gene Alias:** CDS1, CHK2, HuCds1, LFS2, PP1425, RAD53

**Gene Summary:** In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]