

**User's Manual**

Human CHEK2 ELISA Matched Antibody Pair

REF ABPR-0205**RUO**

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

 **Address:** 45-1 Ramsey Road, Shirley, NY 11967, USA

 **Tel:** 1-631-624-4882 (USA) 44-161-818-6441 (Europe)  **Fax:** 1-631-938-8221

 **Email:** info@creative-diagnostics.com  **Web:** www.creative-diagnostics.com

PRODUCT INFORMATION

Intended Use

This antibody pair set comes with matched antibody pair to detect and quantify protein level of human CHEK2.

General Description

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. Several transcript variants encoding different isoforms have been found for this gene.

Reagents And Materials Provided

Antibody pair set content:

1. Capture antibody: Magic™ rabbit affinity purified polyclonal anti-CHEK2 (100 µg)
2. Detection antibody: mouse monoclonal anti-CHEK2, IgG2a Kappa (20 µg)

Note: Reagents are sufficient for at least 3-5 x 96 well plates using recommended protocols.

Reconstitution And Storage

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.