

Human DNA repair protein XRCC2 (XRCC2) ELISA Kit



Catalog No: #EK5807

Orders: order@signalwayantibody.com

Package Size: #EK5807-1 48T #EK5807-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Human DNA repair protein XRCC2 (XRCC2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DKFZp781P0919; DNA repair protein XRCC2 RAD51-like X-ray repair cross complementing protein 2 X-ray repair; complementing defective; repair in Chinese hamster
Accession No.	O43543
Uniprot	O43543
GeneID	7516;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.114 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate XRCC2 in samples. An antibody specific for XRCC2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyXRCC2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for XRCC2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of XRCC2 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**XRCC2participates in homologous recombination to maintain chromosome stability and repair DNA damage. This gene is involved in the repair of DNA double-strand breaks by homologous recombination and it functionally complements Chinese hamster irs1, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents.Hamster cells deficient in XRCC2 showed a more than 100-fold decrease in homologous recombination induced by double-strand breaks compared with the parental cell line. This defect was corrected to almost wildtype levels by transient transfection with a plasmid expressing XRCC2. The repair defect in XRCC2 mutant cells appeared to be restricted to recombinational repair because nonhomologous end joining was normal.

Note: This product is for in vitro research use only