

# Bovine Methionine synthase reductase (MTRR) ELISA Kit

Catalog No: #EK11500

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Package Size: #EK11500-1 48T #EK11500-2 96T

## Description

Product Name	Bovine Methionine synthase reductase (MTRR) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Bovine (Bos taurus; Cattle)
Other Names	MGC129643; MSR; cblE; [methionine synthase]-cobalamin methyltransferase (cob(II)alamin reducing)[methionine synthase reductase
Accession No.	Q4JIJ3
Uniprot	Q4JIJ3
GeneID	280869;
Storage	<p>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.</p> <p>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).</p>

## Application Details

Detect Range:0.625-40 ng/mL

Sensitivity:0.278 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:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate MTRR in samples. An antibody specific for MTRR has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMTRR present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MTRR 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 MTRR bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Methionine is an essential amino acid required for protein synthesis and one-carbon metabolism. Its synthesis is catalyzed by the enzyme methionine synthase. Methionine synthase eventually becomes inactive due to the oxidation of its cob(II)alamin cofactor.

MTRR encoded by this gene regenerates a functional methionine synthase via reductive methylation. It is a member of the ferredoxin-NADP(+) reductase (FNR) family of electron transferases. Patients of the cbl-E complementation group of disorders of folate/cobalamin metabolism are defective in reductive activation of methionine synthase. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.

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Note: This product is for in vitro research use only