

Datasheet for ABIN1112595 **CD147 ELISA Kit**



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Overview

Quantity:	96 tests
Target:	CD147 (BSG)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of Emmprin in tissue lysates or cell culture supernates.
Sample Type:	Tissue Lysate, Cell Culture Supernatant
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 2 pg/mL
Components:	1. One 96-well plate pre-coated with anti-Human Emmprin antibody 2. Lyophilized Human Emmprin standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-Human Emmprin antibody (Concentrated): 130 µl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target: CD147 (BSG)

Alternative Name: Emmprin / CD147 ([BSG Products](#))

Background: Cluster of Differentiation 147 (CD147) also known as extracellular matrix metalloproteinase inducer (EMMPRIN) or Basigin (BSG), is a member of the immunoglobulin superfamily. It interacts with fibroblasts and stimulates expression of MMPs, and plays an important role in tumor invasiveness and metastasis. This protein is a determinant for the Ok blood group system, and it has been shown to be an essential receptor on red blood cells for the human malaria parasite, *Plasmodium falciparum*.

Pathways: [S100 Proteins](#)

Application Details

Comment: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-human-Emmprin polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-Emmprin polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the Emmprin amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of Emmprin can be calculated.

Plate: Pre-coated

Reagent Preparation: 1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to wells. The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.

Sample Preparation: Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting,

Application Details

then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles.

Cell culture supernate, tissue lysate or body fluids: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C .

Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 1000 × g for 15 min. Analyze the serum immediately or aliquot and store at -20 °C .

Plasma: Collect plasma with heparin, citrate or EDTA as the anticoagulant. Centrifuge at 2-8°C for 15 min at 1000 x g within 30 min of collection. For eliminating the platelet effect, suggesting that further centrifugation for 10 min at 2-8°C at 10000 x g. Analyze immediately or aliquot and store frozen at -20 °C. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN₃ can not be used as test sample preservative, since it is the inhibitor for HRP.

Restrictions: For Research Use only

Handling

Preservative: Sodium azide, Thimerosal (Merthiolate)