

Rat Prostacycline (PGI₂) ELISA Kit

Catalog No: #EK8544



Package Size: #EK8544-1 48T #EK8544-2 96T

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Description

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| Product Name | Rat Prostacycline (PGI ₂) ELISA Kit |
| Brief Description | ELISA Kit |
| Applications | ELISA |
| Species Reactivity | Rat (<i>Rattus norvegicus</i>) |
| 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:0.25-50 ng/mL

Sensitivity:0.125 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 PGI₂ in samples. An antibody specific for PGI₂ has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPGI₂ present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PGI₂ 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 PGI₂ bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:Prostacyclin is produced in endothelial cells from prostaglandin H₂ (PGH₂) by the action of the enzyme prostacyclin synthase. Although prostacyclin is considered an independent mediator, it is called PGI₂ in eicosanoid nomenclature, and is a member of the prostanoids.The series-3 prostaglandin PGH₃ also follows the prostacyclin synthase pathway, yielding another prostacyclin, PGI₃. The unqualified term 'prostacyclin' usually refers to PGI₂. PGI₂ is derived from the -6 arachidonic acid. PGI₃ is derived from the -3 EPA. Prostacyclin (PGI₂) chiefly prevents formation of the platelet plug involved in primary hemostasis (a part of blood clot formation). It does this by inhibiting platelet activation. It is also an effective vasodilator. Prostacyclin's interactions in contrast to thromboxane (TXA₂), another eicosanoid, strongly suggest a mechanism of cardiovascular homeostasis between the two hormones in relation to vascular damage.

Note: This product is for in vitro research use only