

Rat 8-iso prostaglandin F2 α (8-iso-PGF2a) ELISA Kit

Catalog No: #EK7593



Package Size: #EK7593-1 48T #EK7593-2 96T

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Rat 8-iso prostaglandin F2 α (8-iso-PGF2a) 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:24.69-2000 pg/mL

Sensitivity:9.55 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 μ L

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 8-iso-PGF2a in samples. An antibody specific for 8-iso-PGF2a has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any8-iso-PGF2a present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for 8-iso-PGF2a 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 8-iso-PGF2a bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview:The isoprostanes are a family of eicosanoids of non-enzymatic origin produced by the random oxidation of tissue phospholipids by oxygen radicals. Isoprostanes appear as artifacts in tissue and plasma samples which have undergone oxidative degradation during prolonged or improper storage. They also appear in the plasma and urine under normal conditions and are elevated by oxidative stress. At least one of the isoprostanes, 8-isoprostane (8-epi PGF2 α), has been shown to have biological activity. It is a potent pulmonary and renal vasoconstrictor¹ and has been implicated as a causative mediator of hepatorenal syndrome and pulmonary oxygen toxicity.² 8-Isoprostane has been proposed as a marker of antioxidant deficiency and oxidative stress and elevated levels have been found in heavy smokers.³ 8-Isoprostane levels are also a relative indicator of sample integrity for lipid-containing samples such as serum, plasma, and whole cell preparations.

Note: This product is for in vitro research use only