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## 8-Isoprostane Oxidative Stress ELISA Kit with Immunoaffinity Columns

**Cat # 8iso1-IA: ELISA kit for measuring 8-isoprostane in biological and environmental samples: \$497**

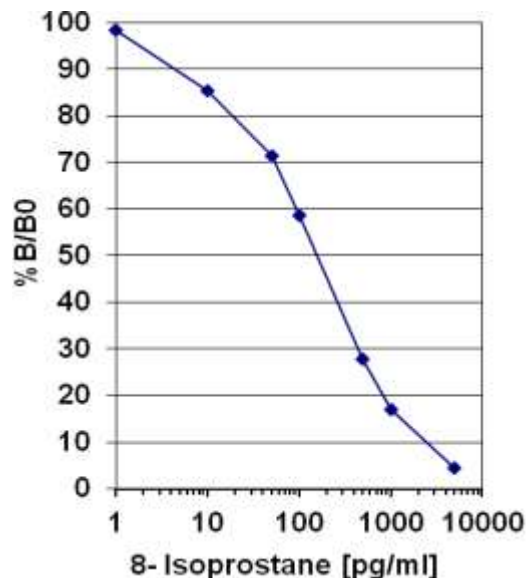
This is the same ELISA kit as our Cat# 8iso1 kit only we have added 10 immunoaffinity columns for one-step purification of 8-isoprostane. Each immunoaffinity column can bind up to 1 microgram of 8-isoprostane. No extraction with organic solvents is necessary.

This competitive ELISA kit is for determination of 8-isoprostane levels in biological samples. A typical standard curve of the ELISA is shown in the bottom left corner.

The isoprostanes are a family of eicosanoids of non-enzymatic origin produced by the random oxidation of tissue phospholipids by oxygen radicals<sup>1</sup>. 8-epi-prostaglandin F2a is an in vivo index of oxidative injury<sup>1</sup> and associated with increased coronary artery calcification (CAC)<sup>2</sup>.

A recent study using the 8-isoprostane ELISA revealed that rat hepatic 8-isoprostane levels increased in high fat (HF) diet-induced non-alcoholic fatty liver disease (NAFLD). Interestingly, telmisartan, an angiotensin II receptor antagonist (hypertension drug), significantly decreased the liver 8-isoprostane levels<sup>3</sup>. Urinary excretion of 8-isoprostane increased in mice by aldosterone infusion-induced renal fibrosis. The level of 8-isoprostane excretion markedly decreased in osteopontin (involved in tumor promotion)-knock-out mice, suggesting that osteopontin is a therapeutic target for oxidative stress-induced kidney injury<sup>4</sup>. Levels of both renal NADPH oxidase subunit mRNA expression and urinary 8-isoprostane were increased in streptozotocin-induced diabetes mellitus (DM)<sup>5</sup>. 8-isoprostane has been examined as an exercise-induced muscle damage biomarker<sup>6</sup> and as a sewage biomarker for assessing community health<sup>7</sup>.

**Buy in Quantity and Save! 2-4 kits \$472 each; 5-9 kits \$447 each; 10 or more kits \$422 each**



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