12-HETE Hypertension ELISA kit

**Cat # 12H 1: ELISA kit for measuring 12-HETE in biological samples: $247**

This competitive ELISA kit is for determination of 12-HETE (12-Hydroxyeicosatetraenoic acid) levels in biological samples. The specificity of the 12-HETE ELISA was investigated using authentic 12-HETE and fatty acids which, based on their structure, might be anticipated to compete with 12-HETE for binding to antibodies against 12-HETE. Anti-12-HETE only slightly cross-reacted with 15-HETE and 13-HODE.

HETEs are byproducts generated by the metabolism of arachidonic acid by lipoxygenases. 12(S)-HETE is the stereospecific hydroxyl product produced from the reduction of 12(S)-hydroperoxytetraenoic eicosatetraenoic acid [12(S)-HpETE], which is itself a 12-lipoxygenase metabolite of arachidonic acid. It has recently been reported that platelet 12(S)-HETE production is enhanced in the spontaneously hypertensive rat. 12(S)-HETE levels and 12-lipoxygenase (12-LO) protein are increased in patients with essential hypertension, also suggesting a role for this metabolite in human hypertension. These metabolites exhibit a variety of biological activities such as mediation of angiotensin II-induced intracellular calcium transients in cultured rat vascular smooth muscle cells and as a second messenger in angiotensin-II induced aldosterone production. 12(S)-HETE also acts as an aggregator of polymorphonuclear leukocytes and is a highly selective ligand used to label mu opioid receptors and serves as a biomarker of Churg-Strauss syndrome.

Each kit can be used for triplicate analyses of up to 24 samples contains using a 96 well plate format, and contains a vial of 12-HETE standard, a vial of 12-HETE conjugated horseradish peroxidase (HRP), and buffers for sample and HRP dilutions, and plate washing.

**Cat # 20H 11: 2X ELISA kits for measuring 12-HETE in biological samples: 2X $241.50 = $483**

**Cat # 20H 21: 5X ELISA kits for measuring 12-HETE in biological samples: 5X $219.60 = $1098**

**Cat # 20H 101: 10X ELISA kits for measuring 12-HETE in biological samples: 10X $205 = $2053**

**Related Products**

**Hypertension/Stroke ELISA kits:**
- 14,15-DHET Hypertension/Stroke ELISA
- 11,12-DHET Hypertension/Stroke ELISA
- 20-HETE Hypertension/Stroke ELISA

**Cancer ELISA Kit:**
- NAG-1 (MIC-1, GDF15) Cancer ELISA
- 12-HETE Cancer ELISA

**Oxidative Stress ELISA Kit:**
- 8-isoprostane ELISA

**Hypertension Antibodies:**
- Rat: CYP2C23, CYP2C11, CYP2C, CYP4A, sEH
- Human: CYP1B1, CYP2C8/9
Specificity of anti-20-HETE ELISA

<table>
<thead>
<tr>
<th>Eicosanoids</th>
<th>% Binding of control</th>
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<tbody>
<tr>
<td>12-HETE</td>
<td>100.00</td>
</tr>
<tr>
<td>15-HETE</td>
<td>3.8</td>
</tr>
<tr>
<td>13-HODE</td>
<td>2.6</td>
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References


