# Bradykinin ELISA kit ab136936

<table>
<thead>
<tr>
<th>Overview</th>
<th>Bradykinin ELISA kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Bradykinin ELISA</td>
</tr>
<tr>
<td>Detection method</td>
<td>Colorimetric</td>
</tr>
<tr>
<td>Precision</td>
<td></td>
</tr>
</tbody>
</table>

### Intra-assay Precision

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffer</td>
<td>20</td>
<td>695.4pg/ml</td>
<td>4.6%</td>
<td></td>
</tr>
<tr>
<td>Buffer</td>
<td>20</td>
<td>208.7pg/ml</td>
<td>6.2%</td>
<td></td>
</tr>
<tr>
<td>Buffer</td>
<td>20</td>
<td>73.7pg/ml</td>
<td>9.9%</td>
<td></td>
</tr>
</tbody>
</table>

### Inter-assay Precision

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffer</td>
<td></td>
<td>700.4pg/ml</td>
<td>= 15%</td>
<td></td>
</tr>
<tr>
<td>Buffer</td>
<td></td>
<td>209.3pg/ml</td>
<td>= 10.3%</td>
<td></td>
</tr>
<tr>
<td>Buffer</td>
<td></td>
<td>66.1pg/ml</td>
<td>= 11.9%</td>
<td></td>
</tr>
</tbody>
</table>

### Sample type

- Urine, Serum, Plasma

### Assay type

- Competitive

### Sensitivity

- 24.8 pg/ml

### Range

- 11.7 pg/ml - 30000 pg/ml

### Recovery

<table>
<thead>
<tr>
<th>Sample type</th>
<th>Average %</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine</td>
<td>109</td>
<td>10pg/ml - 2000pg/ml</td>
</tr>
<tr>
<td>Serum</td>
<td>113</td>
<td>100pg/ml - 2000pg/ml</td>
</tr>
<tr>
<td>Sample type</td>
<td>Average %</td>
<td>Range</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td>Plasma</td>
<td>110</td>
<td>100pg/ml - 20000pg/ml</td>
</tr>
</tbody>
</table>

Assay time

3h 00m

Assay duration

Multiple steps standard assay

Species reactivity

Reacts with: Species independent

Product overview

Bradykinin ELISA kit is a competitive Enzyme-Linked Immunosorbent Assay designed for the accurate quantitative measurement of Bradykinin in plasma, serum and urine.

A goat anti-Rabbit IgG antibody has been precoated onto 96-well plates. Standards or test samples are added to the wells, along with a solution of Bradykinin conjugated to biotin, followed by a solution of polyclonal antibody to Bradykinin. The plate is washed to remove unbound reagents. A solution of streptavidin-HRP conjugate is then added. After further incubation the excess reagents are washed away and TMB substrate is added, which is catalyzed by HRP to generate a yellow color. A stop solution changes this color from yellow to blue, and the intensity of this blue coloration is inversely proportional to the amount of Bradykinin captured in the plate.

Platform

Microplate

Properties

Function

(1) Kininogens are inhibitors of thiol proteases; (2) HMW-kininogen plays an important role in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII; (3) HMW-kininogen inhibits the thrombin- and plasmin-induced aggregation of thrombocytes; (4) the active peptide bradykinin that is released from HMW-kininogen shows a variety of physiological
effects: (4A) influence in smooth muscle contraction, (4B) induction of hypotension, (4C) natriuresis and diuresis, (4D) decrease in blood glucose level, (4E) it is a mediator of inflammation and causes (4E1) increase in vascular permeability, (4E2) stimulation of nociceptors (4E3) release of other mediators of inflammation (e.g. prostaglandins), (4F) it has a cardioprotective effect (directly via bradykinin action, indirectly via endothelium-derived relaxing factor action); (5) LMW-kininogen inhibits the aggregation of thrombocytes; (6) LMW-kininogen is in contrast to HMW-kininogen not involved in blood clotting.

**Tissue specificity**
Secreted in plasma. T-kinin is detected in malignant ovarian, colon and breast carcinomas, but not in benign tumors.

**Involvement in disease**
Defects in KNG1 are the cause of high molecular weight kininogen deficiency (HMWK deficiency) [MIM:228960]. HMWK deficiency is an autosomal recessive coagulation defect. Patients with HMWK deficiency do not have a hemorrhagic tendency, but they exhibit abnormal surface-mediated activation of fibrinolysis.

**Sequence similarities**
Contains 3 cystatin domains.

**Post-translational modifications**
Bradykinin is released from kininogen by plasma kallikrein.
Hydroxylation of Pro-383 occurs prior to the release of bradykinin.
Phosphorylation sites are present in the extracellular medium.
N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans.

**Cellular localization**
Secreted > extracellular space.

**Images**
Representative standard curve using ab136936.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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