DetectX® Cortisol ELISA Kits

- Consistent and reliable assay results
- Standard Range: 3200-50 pg/mL
- Sensitivity: 1.85 pg/mL
- Time to Answer: 90 minutes
- Variety of sample types: feces, hair, and nail extracts, urine, serum, plasma, and saliva
- N-Cal Kit, NIST - calibrated standard
- Measure up to 39 or 231 samples in duplicate
- 4°C stable liquid reagents
- Cited in over 170 publications

DetectX® CORTISOL ELISA KITS (K003-H1/H5/H1W/H5W)

- Adrenocorticotropin Hormone (ACTH) ELISA Kits (K072-H1/H5)
- Corticosterone Chemiluminescent ELISA Kits (K014-C1/C5)
- Corticosterone ELISA Kits (K014-H1/H5/H1W/H5W)
- Cortisone Chemiluminescent ELISA Kits (K017-C1/C5)
- Cortisone ELISA Kits (K017-H1/H5)
- Hemoglobin Colorimetric Detection Kit (K013-H1)
- Hemoglobin High Sensitivity Colorimetric Detection Kits (K013-HX1/HX5)

Cortisol is the primary glucocorticoid produced and secreted by the adrenal cortex and is referred to as the “stress hormone,” as it is involved in the response to stress and it affects blood pressure, blood sugar levels, and other actions of stress adaptation.

Production of cortisol follows an ACTH-dependent circadian rhythm, with a peak level in the morning and decreasing levels throughout the day.

Abnormal levels of cortisol are involved in Cushing’s syndrome and Addison’s disease.

Abnormal cortisol levels are being evaluated for correlation with a variety of different conditions such as prostate cancer, depression, and schizophrenia.
Intra Assay Precision
Three human samples were diluted with Assay Buffer and run in replicates of 20 in an assay. The mean and precision of the calculated cortisol concentrations were:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Cortisol Conc. (pg/mL)</th>
<th>%CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,174.3</td>
<td>6.0</td>
</tr>
<tr>
<td>2</td>
<td>475.9</td>
<td>5.6</td>
</tr>
<tr>
<td>3</td>
<td>177.4</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Inter Assay Precision
Three human samples were diluted with Assay Buffer and run in duplicates in ten assays run over multiple days by four operators. The mean and precision of the calculated cortisol concentrations were:

<table>
<thead>
<tr>
<th>Sample</th>
<th>Cortisol Conc. (pg/mL)</th>
<th>%CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,188.1</td>
<td>7.2</td>
</tr>
<tr>
<td>2</td>
<td>508.7</td>
<td>6.3</td>
</tr>
<tr>
<td>3</td>
<td>199.7</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Typical Standard Curves

Always run your own standard curves for calculation of results. Do not use this data.