## Arginase Activity Assay Kit (Colorimetric) ab180877

### Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Arginase Activity Assay Kit (Colorimetric)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection method</td>
<td>Colorimetric</td>
</tr>
<tr>
<td>Sample type</td>
<td>Tissue, Adherent cells, Suspension cells</td>
</tr>
<tr>
<td>Assay type</td>
<td>Enzyme activity (quantitative)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>&lt; 0.2 U/ml</td>
</tr>
<tr>
<td>Assay time</td>
<td>1h 00m</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Mammals, Other species</td>
</tr>
</tbody>
</table>

**Product overview**

Arginase Activity Assay Kit (Colorimetric) ab180877 is a simple, sensitive and rapid assay to quantify arginase activity.

In the arginase assay protocol, arginase reacts with arginine and undergoes a series of reactions that form an intermediate that react stoichiometrically with the probe to generate a colored product that can detected at OD = 570 nm.

The kit can detect less than 0.2 U/L Arginase activity in 96-well assay format.

**Arginase assay protocol summary:**
- add samples and standards to wells
- add arginase substrate mix to sample wells only
- incubate for 20 min
- add arginase assay reaction mix to all wells
- analyze with microplate reader in kinetic mode for 10-30 min

**Notes**

Arginase (EC 3.5.3.1) is the final enzyme of the Urea Cycle. It converts L-arginine into urea and L-ornithine and plays an important role in removing ammonium ion from the body.

**Platform**

Microplate reader

**Storage instructions**

Store at -20°C. Please refer to protocols.
Pathway
Nitrogen metabolism; urea cycle; L-ornithine and urea from L-arginine: step 1/1.

Involvement in disease
Argininemia

Sequence similarities
Belongs to the arginase family.

Cellular localization
Cytoplasm.

Components

<table>
<thead>
<tr>
<th>Identifier</th>
<th>100 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>Blue</td>
<td>1 vial</td>
</tr>
<tr>
<td>Orange</td>
<td>1 vial</td>
</tr>
<tr>
<td>Green</td>
<td>1 vial</td>
</tr>
<tr>
<td>Purple</td>
<td>1 vial</td>
</tr>
<tr>
<td>White</td>
<td>1 vial</td>
</tr>
<tr>
<td>Yellow</td>
<td>1 x 100µl</td>
</tr>
<tr>
<td>Red</td>
<td>1 x 200µl</td>
</tr>
</tbody>
</table>

Pathway
Nitrogen metabolism; urea cycle; L-ornithine and urea from L-arginine: step 1/1.

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Images

H₂O₂ Standard Curve. Assay performed following kit protocol.
Arginase activity in rat liver lysate (3 µg) & Positive Control (2 µL). Assays were performed following the kit protocol.

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