**(-)-Epigallocatechin gallate (EGCG)**

- **Cat. No.**: A2600
- **CAS No.**: 989-51-5
- **Formula**: C22H18O11
- **M.Wt.**: 458.37
- **Synonyms**: EGCG
- **Target**: TGF-β / Smad Signaling
- **Pathway**: PKC
- **Storage**: Store at -20°C

### Solvent & Solubility

≥22.9mg/mL in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1mM</td>
<td>2.1816mL</td>
<td>10.9082mL</td>
<td>21.8164mL</td>
</tr>
<tr>
<td></td>
<td>5mM</td>
<td>0.4363mL</td>
<td>2.1816mL</td>
<td>4.3633mL</td>
</tr>
<tr>
<td></td>
<td>10mM</td>
<td>0.2182mL</td>
<td>1.0908mL</td>
<td>2.1816mL</td>
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</tbody>
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Please refer to the solubility information to select the appropriate solvent.

### Biological Activity

**Shortsummary**: Antioxidant, antiangiogenic and antitumor agent

**IC₅₀ & Target**

**In Vitro**

**Cell Viability Assay**

- **Cell Line**: Human and rat neural progenitor cells (NPCs)
- **Preparation method**: The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
- **Reacting conditions**: 0, 1, 2, 5 and 10 μM; 24 or 48 hrs
- **Applications**: (-)-Epigallocatechin Gallate (EGCG) altered human and rat NPC development
in vitro. EGCG affected migration distance, migration pattern and nuclear density of NPCs growing as neurospheres. EGCG exerted these functional impairments by binding to the extracellular matrix (ECM) glycoprotein laminin, preventing its binding to β1-integrin subunits, thereby prohibiting cell adhesion and resulting in altered glia alignment and decreased number of migrating young neurons.

<table>
<thead>
<tr>
<th>Animal experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Animal models:</strong></td>
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<td><strong>Dosage form:</strong></td>
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<td><strong>Applications:</strong></td>
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<td><strong>Other notes:</strong></td>
</tr>
</tbody>
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**References**


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