Non-hydrolyzable GTP Test Kit
screening kit for GTP-binding proteins

Cat. No. | Amount
--- | ---
NK-102 | 5 GTP analogs

Structures of non-hydrolyzable Guanosine-5'-triphosphate analogs

For *in vitro* use only!

**Shipping:** shipped on blue ice

**Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

**Shelf Life:** 12 months after date of delivery

**Description:**
The enzymes involved in hydrolysis of nucleoside triphosphates are a major focus of biochemical research, targeting the understanding and treatment of cellular processes involved in diseases such as cancer, viral infections, cardiovascular and motional disorders. To elucidate the mechanisms of action of these enzymes, it is often desirable to trap the enzymes in their triphosphate-bound state. Since natural nucleotides are hydrolyzed at rates usually preventing such studies, nucleotide analogs are used that are hydrolyzed at much smaller rates or that are even completely resistant to hydrolysis.

The Non-hydrolyzable GTP Test Kit contains a set of 5 typical non-hydrolyzable Guanosine-5'-triphosphate analogs. The position of the modification within the triphosphate exerts influence on its binding affinity to a particular enzyme and its hydrolysis rate. This Kit is designed to identify the most suitable non-hydrolyzable GTP derivative for your application.

**Content:**

<table>
<thead>
<tr>
<th>Non-hydrolyzable Guanosine Nucleotide</th>
<th>Cat. No.</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTPαS</td>
<td>NU-409</td>
<td>100 µl (10 mM)</td>
</tr>
<tr>
<td>GpCpp</td>
<td>NU-405</td>
<td>100 µl (10 mM)</td>
</tr>
<tr>
<td>GppCp</td>
<td>NU-402</td>
<td>100 µl (10 mM)</td>
</tr>
<tr>
<td>GppNHp*</td>
<td>NU-401</td>
<td>5 mg</td>
</tr>
<tr>
<td>GTPγS*</td>
<td>NU-412</td>
<td>5 mg</td>
</tr>
</tbody>
</table>

Included as a solid for stability reasons. Please dissolve in water and adjust concentration photometrically (extinction coefficient $\epsilon_{259\text{nm}} = 15.300 \text{ M}^{-1}\text{cm}^{-1}$) prior to use to obtain a fresh solution.

**Selected References:**


Dye et al. (1996) Assembly of microtubules from tubulin bearing the nonhydrolyzable guanosine triphosphate analogue GMPPCP [Guanylyl 5'-}
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