**G_Sα₅-Leu²¹²**  
stimulatory heterotrimeric G-protein, short splice variant of the α-subunit  
rat, recombinant, Sf9 insect cells

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
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<tbody>
<tr>
<td>PR-508</td>
<td>1 ml</td>
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**Description**  
$G_{S\alpha_S}$ is the short splice variant of the α-subunit of stimulatory heterotrimeric $G_S$-proteins. In contrast to the long splice variant ($G_{S\alpha_L}$), $G_{S\alpha_S}$ lacks the 15-amino acid insert between the Ras-like and the α-helical domain. $G_{S\alpha_S}$ activates adenylate cyclase (AC) and possesses a higher GDP-affinity than $G_{S\alpha_L}$. The differences in GDP-binding between $G_{S\alpha_S}$ and $G_{S\alpha_L}$ have important consequences for receptor/G-protein coupling and activation.

The exchange of Gln²¹² to Leu²¹² inhibits the intrinsic GTPase activity, resulting in a constitutively activated $G_\alpha$, and increases GDP-affinity of $G_\alpha$.

**Selected References:**  


**Associated products available from Jena Bioscience**  
Non-hydrolyzable GTP-analogs (such as GTPγS, GppCP, GppNHp, NPE-caged-GTP...)

Fluorescent GTPs (such as MANT, ANT, TNP, or GTP labeled with a dye of your choice)

Recombinant G-protein signaling reagents (including GAPs, GEFs, heterotrimeric G-proteins, and many more...)

For further information please visit www.jenabioscience.com.