

# Active Recombinant Gaussia Luciferase Protein, Streptavidin-Labeled

**Cat. No.** Luciferase-105G    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	<p>Gaussia(M2)-Luciferase-Streptavidin is a conjugate of one of the brightest luciferases and a protein with the highest known affinity in nature.</p> <p>in vitro fusion of two independently expressed proteins in different organisms</p> <p>Gaussia(M2)-Avitag-biotin-Streptavidin</p>
<b>Species</b>	Gaussia
<b>Description</b>	Gaussia Luciferase is a new reporter gene isolated from the marine copepod Gaussia princeps.
<b>Form</b>	Clear liquid
<b>Bio-activity</b>	<p>Recommended CTZ concentration for luminometer: 50 <math>\mu</math>M</p> <p>Around 3-fold brighter than wildtyp GLuc-SA</p> <p>Binding efficiency greater than 90%</p> <p>Very sensitive: use 0.1 to 1 ng of GLuc-SA for biotin coated plates</p>
<b>Applications</b>	This fusion protein can be used to detect trace amounts of biotinylated protein, DNA, or other biotinylated bio-molecules.
<b>Storage</b>	Store protein at -80 centigrade for maximum shelf-life, avoid repeated freezing
<b>Concentration</b>	1 mg/mL

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**Storage Buffer** TBS, pH 7.8 + nonproteinogenic stabilizers

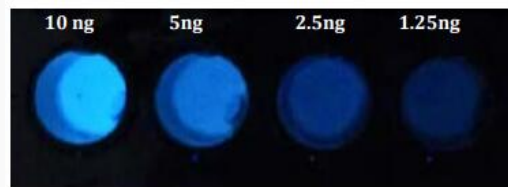
**Dilutions** TBS or Gaussia dilution buffer

## GENE INFORMATION

**Official Symbol** Luciferase

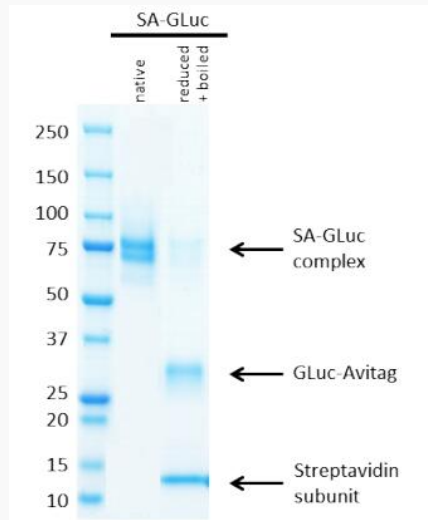
**Synonyms** Luciferase; Gaussia luciferase; GLuc

**Dilution series (1:2)  
of GLuc-SA in a  
black 96-well plate**



Picture was taken with a regular camera.

**Representative SDS  
PAGE of GLuc-SA in  
native and reduced  
and oxidized form**



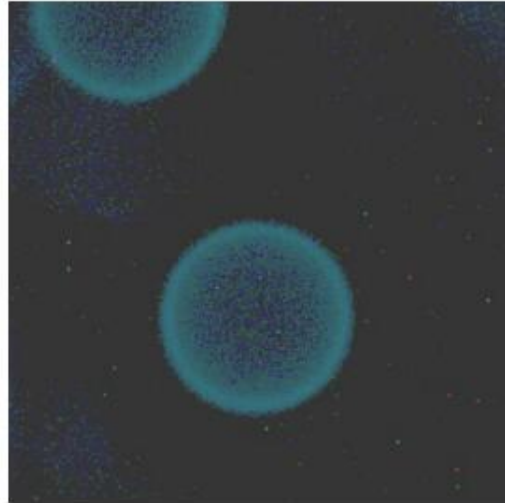
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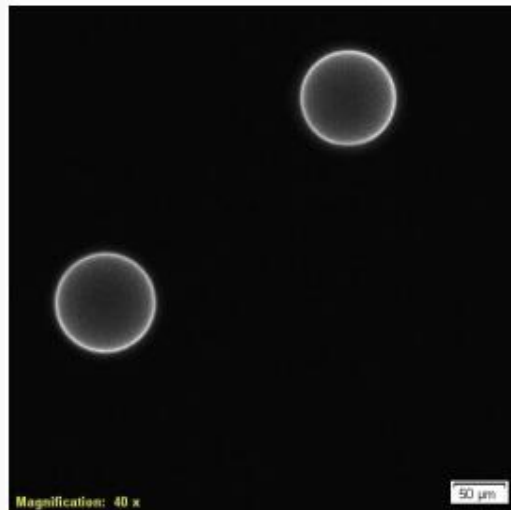
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One GLuc-SA molecule consists of one GLucA vitag protein (27 kDa) and 4 Streptavidin subunits (13 kDa).

**Biotin-Agarose beads (100  $\mu$ m) coated with SA-GLuc examined with Nikon microscope with no filter in total darkness.**



**Biotin-Agarose beads (100  $\mu$ m) coated with GLuc-SA examined with Olympus LV-200 bioluminescence imaging**



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**Biotin coated plate  
binding activity  
comparison**

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