

## Anti-GFP Nanobody Affinity Gel

<b>Catalog# / Size</b>	689302 / 1 mL 689303 / 2 mL 689304 / 5 mL
<b>Clone</b>	LaG-19
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Green fluorescent protein, GFP
<b>Isotype</b>	Llama VH Ig
<b>Description</b>	<p>Green fluorescent protein (GFP) was originally identified as a protein involved in bioluminescence, which is from the jellyfish <i>Aequorea victoria</i>. It is widely used as a fluorescent indicator for monitoring gene expression in a variety of cellular systems, including living organisms and fixed tissues. Unlike other bioluminescent reporters, GFP fluoresces without the need for exogenous substrates or cofactors, or other intrinsic or extrinsic proteins. This makes GFP a useful tool for monitoring gene expression and protein localization <i>in vivo</i>. Purified GFP is a 27 kD monomer consisting of 238 amino acids and emits green light (emission maximum at 509 nm) when excited with blue or UV light.</p>

Nanobodies are heavy chain only, single-domain antibodies, that lack the presence of light chains. These are typically derived from members of the Camelidae family that include llamas and camels. Their variable region (VHH) is the smallest antigen-binding fragment found in a natural antibody, and nanobodies are the smallest ( $\approx 15$  kD) naturally occurring immunoglobins. Further, nanobodies are stable, and can bind antigens with high affinity. Experimentally, nanobodies have been applied in WB, IF, and IP. In IP/WB applications, nanobodies can avoid IgG heavy/light chain issues that occur when using regular antibodies.

### Product Details

---

<b>Verified Reactivity</b>	Victoria GFP
<b>Antibody Type</b>	Recombinant
<b>Immunogen</b>	Victoria GFP
<b>Formulation</b>	50% anti-GFP nanobody (clone LaG-19) conjugated resin is supplied in 1X PBS and 0.09% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> . The volume specified for each catalog number indicates the volume of resin included.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Storage &amp; Handling</b>	Upon receipt, store between 2°C and 8°C. The unopened product is stable for one year upon arrival.
<b>Application</b>	<a href="#">IP - Quality tested</a>
<b>Recommended Usage</b>	For immunoprecipitation, the suggested use of this reagent is 5 - 20 $\mu$ l affinity gel for 100 $\mu$ g lysate harvested from GFP overexpressed cells.

### Antigen Details

---

<b>Structure</b>	GFP is a 27 kD monomer consisting of 238 amino acids.
<b>Function</b>	Fluorescent protein.
<b>Biology Area</b>	Cell Biology
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Rizzuto R, <i>et al.</i> 1996. <i>Curr. Biol.</i> 6:183.</li><li>2. Chalfie M, <i>et al.</i> 1994. <i>Science</i> 263:802.</li><li>3. Cortez-Retamozo V, <i>et al.</i> 2004. <i>Cancer Res.</i> 64:2853.</li><li>4. Muyldermans S. 2013. <i>Annu. Rev. Biochem.</i> 82:775.</li><li>5. Fridy PC, <i>et al.</i> 2014. <i>Nat. Methods</i> 11:1253.</li></ol>

Gene ID

NA

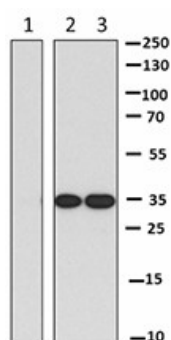
## Related Protocols

[Immunoprecipitation Protocol](#)

## Other Formats

Anti-GFP Nanobody Affinity Gel

## Product Data



GFP-fused protein was immunoprecipitated from 100  $\mu$ g transfected 293E cell extract using 10  $\mu$ l anti-mCherry nanobody Affinity Gel (lane 1, negative control), 10  $\mu$ l anti-GFP nanobody Affinity Gel (lane 2). Immunoprecipitates and 10% of total input (10  $\mu$ g, Lane 3) were resolved by electrophoresis, transferred to nitrocellulose, and probed with purified anti-GFP (clone 1GFP63) antibody. Proteins were visualized using a goat anti-mouse-IgG secondary antibody conjugated to HRP and chemiluminescence detection.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587