Anti-mCherry Nanobody Affinity Gel

Catalog# / Size	689502 / 1 mL
Clone	LaM-4
Regulatory Status	RUO
Other Names	DSRED
Isotype	Llama VH Ig
Description	mCherry is a red fluorescent protein that is often used to tag target proteins and to monitor their subcellular localization. It is the most widely used photostable protein in the class of red-shifted fluorescent proteins. mCherry derives from proteins initially isolated from *Cnidarians*. 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 (≈15 kD) naturally occuring 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

Verified Reactivity	Discosoma mCherry
Antibody Type	Recombinant
Immunogen	Recombinant mCherry.
Formulation	50% anti-mCherry nanobody (clone LaM-4) conjugated resin is supplied in 1X PBS and 0.09% NaN_3. The volume specified for each catalog number indicates the volume of resin included.
Preparation	The antibody was purified by affinity chromatography.
Storage & Handling	Upon receipt, store between 2°C and 8°C. The unopened product is stable for one year upon arrival.
Application	IP - Quality tested
Recommended Usage	For immunoprecipitation, the suggested use of this reagent is 5 - 20 µl affinity gel for 100 µg lysate harvested from mCherry overexpressed cells.

Antigen Details

Structure	mCherry is 236 amino acids with a predicted molecular weight of approximately 27 kD.
Function	Fluorescent protein.
Biology Area	Cell Biology
Antigen References	1. Shaner NC, *et al.* 2008. *Nat. Methods.* 6:545-51. 2. Shaner NC, *et al.* 2005. *Nat. Methods* 12:905-9. 3. Cortez-Retamozo V, *et al.* 2004. *Cancer Res.* 64:2853. 4. Muyldermans S. 2013. *Annu. Rev. Biochem.* 82:775. 5. Fridy PC, *et al.* 2014. *Nat. Methods* 11:1253.
Gene ID	NA

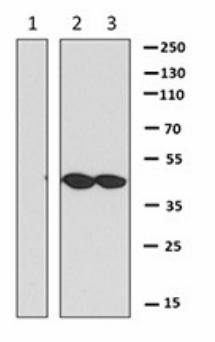
Related Protocols

Immunoprecipitation Protocol

Other Formats

Anti-mCherry Nanobody Affinity Gel

Product Data



mCherry-fused protein was immunoprecipitated from 100 µg transfected 293E cell extract using 10 µl anti-GFP nanobody Affinity Gel (lane 1, negative control) and 10 µl anti-mCherry nanobody Affinity Gel (lane 2). Immunoprecipitates and 10% of total input (10 µg, Lane 3) were resolved by electrophoresis, transferred to nitrocellulose, and probed with Direct-Blot™ HRP anti-mCherry Antibody (clone 8C5.5). Proteins were visualized using chemiluminescence detection.

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