

## Datasheet: TZC013

**BATCH NUMBER 163998**

|                      |                          |
|----------------------|--------------------------|
| <b>Description:</b>  | RABBIT IgG-FcSpyCatcher3 |
| <b>Name:</b>         | RABBIT IgG-FcSPYCATCHER3 |
| <b>Format:</b>       | Catcher                  |
| <b>Product Type:</b> | Recombinant Protein      |
| <b>Quantity:</b>     | 0.5 mg                   |

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|             | Yes | No | Not Determined | Suggested Dilution |
|-------------|-----|----|----------------|--------------------|
| Immunoassay | ▪   |    |                |                    |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

|                                       |  |
|---------------------------------------|--|
| <b>Target Species</b>                 | Protein/peptide tag  |
| <b>Product Form</b>                   | FcSpyCatcher3 purified recombinant protein, fused to the hinge region, CH2, and CH3 of rabbit IgG - liquid |
| <b>Preparation</b>                    | Recombinant protein expressed in mammalian cell line and purified by affinity chromatography               |
| <b>Buffer Solution</b>                | Phosphate buffered saline  |
| <b>Preservative Stabilisers</b>       | 0.0095% MIT  |
| <b>Approx. Protein Concentrations</b> | 80 $\mu$ M (6.1 mg/ml)   |

**Product Information** **Rabbit IgG-FcSpyCatcher3** (rIgG-FcSpyC3) contains a SpyCatcher3 ([Keeble et al. 2019](#)) fused to the hinge region, CH2 and CH3 of rabbit IgG ([Hentrich et al. 2020](#)), resulting in a 76.1 kDa protein for the disulfide-bridged dimer. Each SpyCatcher3 subunit can form a stable covalent isopeptide bond with a second protein that includes a SpyTag.

The reaction occurs spontaneously on mixing, is rapid, irreversible, high-yielding and shows good specificity. The reaction is robust at pH 5 to 8, at temperatures from +4°C to +37°C, in various buffer conditions (Ca<sup>2+</sup>/Mg<sup>2+</sup> not needed) and in the presence of detergents. The reaction also occurs inside cells (*in vivo*). Since the speed of the coupling reaction is concentration dependent, it is recommended to use rblgG-FcCatcher3 undiluted.

Rabbit IgG-FcSpyCatcher3 is compatible with Bio-Rad's recombinant HuCAL antibodies with a SpyTag2 at the C-terminus of the heavy chain.

[Download FcSpyCatcher coupling protocol](#)

[View all available Catchers](#)

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|---------------------------------|--------------------|
| <b>Protein Molecular Weight</b> | Predicted 76132 Da |
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| <b>Purity</b> | ≥90% determined by SDS-PAGE under reducing conditions and visualized by coomassie blue staining |
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| <b>Instructions For Use</b> | <a href="#">View FcSpyCatcher Coupling Protocol</a> |
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| <b>References</b> | 1. Hentrich, C. <i>et al.</i> (2021) Periplasmic expression of SpyTagged antibody fragments enables rapid modular antibody assembly. <a href="#">Cell Chem Biol. 28 (6): 813-824.e6.</a> |
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| <b>Storage</b> | Store at -20°C only.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use. |
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| <b>Guarantee</b> | 12 months from date of despatch |
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| <b>Acknowledgements</b> | This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details. |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #20480 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZC013">https://www.bio-rad-antibodies.com/SDS/TZC013</a><br>20480 |
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| <b>Licensed Use</b> | For <i>in vitro</i> research purposes. Any re-sale in any form or any other commercial application needs a written agreement with Bio-Rad. |
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| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Useful Reagents

[SpyTag3 PEPTIDE \(BLP086\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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