

Datasheet: TZX009

**BATCH NUMBER 156815**

<b>Description:</b>	HUMAN IgG1-FcSpyCatcher3
<b>Name:</b>	HUMAN IgG1-FcSPYCATCHER3
<b>Format:</b>	Catcher
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	1 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 human IgG1 - 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>	0.1% ProClin 950
<b>Approx. Protein Concentrations</b>	80 µM (6.2 mg/ml)

**Product Information** **Human IgG1-FcSpyCatcher3** (hIgG1-FcSpyC3) contains a SpyCatcher3 ([Keeble et al. 2019](#)) fused to the hinge region, CH2 and CH3 of human IgG1 ([Hentrich et al. 2020](#)), resulting in a 77.2 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 hIgG1-FcCatcher3 undiluted.

Human IgG1-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 77166 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>Storage</b>	Store at -20°C only. Storage in frost-free freezers is not recommended. 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>	ProClin is a trademark of The Dow Chemical Company (“Dow”) or an affiliated company of Dow Sold under license of patent and patent applications, including but not limited to European patent EP2534484B1, UK patent GB1903479.2, the US patents US9,547,003, US10,247,727, US16/274908, US20200299369 and corresponding patents HuCAL® is a registered trademark of MorphoSys AG
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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/TZC009">https://www.bio-rad-antibodies.com/SDS/TZC009</a> 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

[HUMAN IgG1-FcSpyCatcher3:Biotin \(TZC009B\)](#)

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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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