

Datasheet: TZC009

Description:	HUMAN IgG1-FcSpyCatcher3
Name:	HUMAN IgG1-FcSPYCATCHER3
Format:	Catcher
Product Type:	Recombinant Protein
Quantity:	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.

	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.

Target Species	Protein/peptide tag
Product Form	FcSpyCatcher3 purified recombinant protein, fused to the hinge region, CH2, and CH3 of human IgG1 - liquid
Preparation	Recombinant protein expressed in mammalian cell line and purified by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% ProClin 950
Approx. Protein Concentrations	80 μ M (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 (Ca²⁺/Mg²⁺ 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](#)

Protein Molecular Weight	Predicted 77166 Da
---------------------------------	--------------------

Purity	≥90% determined by SDS-PAGE under reducing conditions and visualized by coomassie blue staining
---------------	---

Instructions For Use	View FcSpyCatcher Coupling Protocol
-----------------------------	---

Storage	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.
----------------	---

Guarantee	12 months from date of despatch
------------------	---------------------------------

Acknowledgements	ProClin is a trademark of The Dow Chemical Company (“Dow”) or an affiliated company of Dow 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 bio-rad.com/en-us/trademarks for details.
-------------------------	--

Health And Safety Information	Material Safety Datasheet documentation #20480 available at: 20480: https://www.bio-rad-antibodies.com/uploads/MSDS/20480.pdf
--------------------------------------	--

Licensed Use	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.
---------------------	--

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Useful Reagents

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

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

To

America Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

find a

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M399043:220628'

Printed on 28 Jun 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)