

Datasheet: TZC019

BATCH NUMBER 157516

Description:	HUMAN IgG4-Pro-FcSpyCatcher3
Name:	HUMAN IgG4-Pro-FcSPYCATCHER3
Format:	Catcher
Product Type:	Recombinant Protein
Quantity:	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.

	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	Purified recombinant protein - 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 µM (6.1 mg/ml)

Product Information **Human IgG4-Pro-FcSpyCatcher3** (hIgG4-Pro-FcSpyC3) contains a SpyCatcher3 ([Keeble *et al.* 2019](#)) fused to the hinge region, CH2 and CH3 of human IgG4-Pro ([Hentrich *et al.* 2020](#)), resulting in a 76.5 kDa protein for the disulfide-bridged dimer. The IgG4-Pro sequence has a mutation S228P in the core hinge region that prevents the formation of IgG4 half molecules. 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 hlgG4-Pro-FcCatcher3 undiluted.

Human IgG4-Pro-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 76514 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 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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