

dynamic BIOSENSORS HK-FC-3 FC Capture A/G Kit User **Manual**

Home » dynamic BIOSENSORS » dynamic BIOSENSORS HK-FC-3 FC Capture A/G Kit User Manual



Contents

- 1 dynamic BIOSENSORS HK-FC-3 FC Capture A/G Kit
- 2 Key Features
- 3 Helix Adapter Chip Overview
- **4 Product Description**
- 5 Workflow of a heliX FC -capture assay
- **6 Preparation**
- 7 Documents / Resources
 - 7.1 References
- **8 Related Posts**



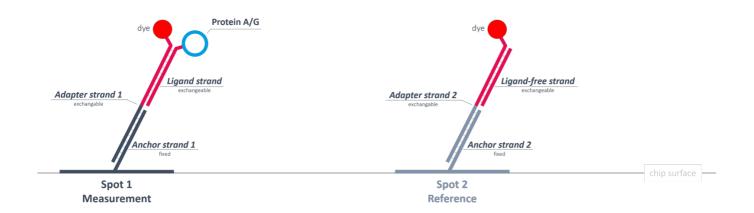
dynamic BIOSENSORS HK-FC-3 FC Capture A/G Kit



Key Features

- This kit is designed for the capture of IgG molecules binding to Protein A and G.
- Compatible with heliX Adapter Chip.
- Includes Adapter strands and Ligand strands modified with Protein A/G for 20 regenerations.
- For functionalization of Spot 1 and Spot 2.
- Adapter strands 1 and 2 carry a moderately hydrophilic red dye (Ra) with a single positive net charge.

Helix Adapter Chip Overview



- 2 spots with 2 different anchor sequences for DNA-encoded addressing.
- Spot 1 is functionalized with the capture molecule while Spot 2 is used as real-time reference.

Product Description

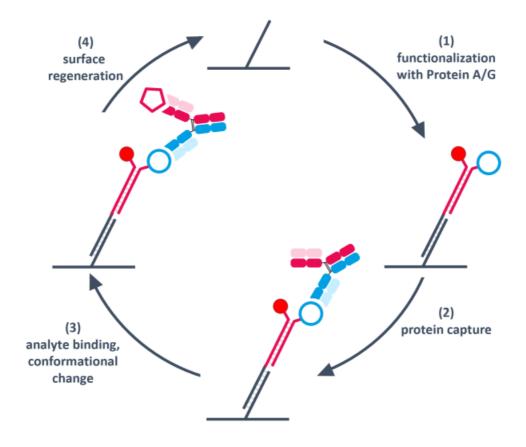
Order Number: HK-FC-3

Table 1. Contents and Storage Information

Material	Сар	Concentration	Amount	Buffer	Storage
Protein A/G - Ligand strand	Red	500 nM	2 x 100 μL	TE40 [1]	2-8°C
Adapter strand 1 - Ra	Black	400 nM	2 x 100 μL	TE40 [1]	-20°C
Adapter strand 2 - Ra - Ifs	White	200/250 nM	2 x 200 μL	TE40 [1]	-20°C

For research use only. This product has a limited shelf life, please see the expiry date on the label. After the preparation of the ready-to-use solution, the expiry date is 6 months. Protein A/G binds to all IgG subclasses from various mammalian species, including all IgGs that bind to both Protein A and Protein G.

Workflow of a heliX FC - -capture assay



- 1. The anchor strand (ssDNA) immobilized to the surface of the heliX Adapter Chip is hybridized with complementary DNA strands modified with Protein A/G.
- 2. The IgG of interest is captured on the surface during the measurement run.
- 3. Measurement of the analyte binding kinetics.
- 4. Surface regeneration by injection of a high pH solution. The chip surface goes back to its original state. This step can be followed by a new hybridization of fresh ligands with Protein A/G.

Preparation

- 1. Mix 100 μ L Protein A/G Ligand strand with 100 μ L Adapter strand 1 Ra.
- 2. Incubate the solution of step 1 at RT at 600 rpm for 30 min to ensure complete hybridization.

- 3. Mix 200 μ L Adapter strand 2 Ra Ifs to the sample after step 2.
- 4. The solution (400 μ L in total) is ready to use for biochip functionalization.
- 5. Please aliquot and store the ready-to-use solution at 2-8°C. Use up within 6 months.
- 6. The kit contains material for the preparation of two separate ready-to-use solutions with 400 μL each.

Assay Setup in heliOS

Go to heliOS > create a New Assay Workflow > add Custom Assay > load Capture with Kinetics > modify the parameters based on your needs and run the assay. Suggested assay parameters (e.g., flow rate, time, LED power, etc.) are within the heliOS assay.

TIP If the fluorescent change signal upon analyte binding is very small, consider using the conjugation approach, to move the binding site closer to the dye. For further questions, please contact the support team at support@dynamic-biosensors.com

Useful Order Numbers

Table 2. Order Numbers

Product Name	Comment	Order No	
heliX [®] Adapter Chip	Chip with 2 detection spots	ADP-48-2-0	
10x Passivation solution	For passivation of chip surface	SOL-PAS-1-5	
Regeneration solution	For regeneration of chip surface	SOL-REG-1-5	

Contact

Dynamic Biosensors GmbH Perchtinger Str. 8/10 81379 Munich

Germany

Dynamic Biosensors, Inc. 300 Trade Center, Suite 1400 Woburn, MA 01801

USA

Order Information <u>order@dynamic-biosensors.com</u>
Technical Support <u>support@dynamic-biosensors.com</u>
<u>www.dynamic-biosensors.com</u>

Instruments and chips are engineered and manufactured in Germany. 2024 Dynamic Biosensors GmbH | Dynamic Biosensors, Inc. All rights reserved.

Documents / Resources



dynamic BIOSENSORS HK-FC-3 FC Capture A/G Kit [pdf] User Manual HK-FC-3 v4.1, HK-FC-3 FC Capture A G Kit, HK-FC-3, FC Capture A G Kit, Capture A G Kit, A G Kit, Kit

References

- ■ HomePage | Biosensors International Ltd
- Dynamic Biosensors
- Dynamic Biosensors
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.