

# **Adapter strand Package**

with red dye Ra

Dynamic Biosensors GmbH & Inc. ASP-1-Ra v5.1



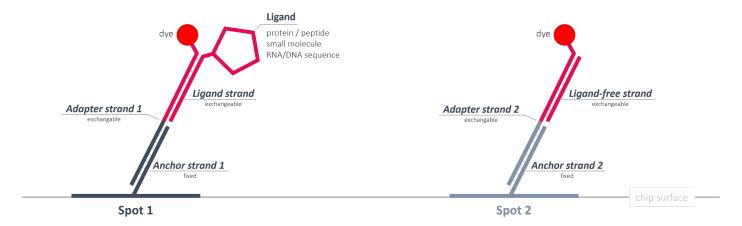


# **Key Features**

- Adapter strand 1 Ra and Adapter strand 2 Ra Ifs (ligand free strand) for functionalization of heliX<sup>®</sup> Adapter
  Chip on Spot 1 and Spot 2, respectively.
- Compatible with helix Adapter Chip.
- Includes Adapter strands for 50 regenerations.
- Ideal for MIX&RUN sample preparation.
- 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.



### **Product Description**

Order Number: ASP-1-Ra

Table 1. Contents and Storage Information

Material	Сар	Concentration	Amount	Buffer	Storage
Adapter strand 1 - Ra	Black	400 nM	5 x 100 μL	TE40 [1]	-20°C
Adapter strand 2 - Ra - Ifs	White	200/250 nM	5 x 200 μL	TE40 [1]	-20°C

For research use only.

This product has a limited shelf life, please see expiry date on label.

To avoid many freeze thaw cycles please aliquot the nanolever.



### Preparation | MIX&RUN

In-solution hybridization of adapter and ligand strands:

- 1. Mix *Adapter strand 1 Ra* (400 nM) and conjugated *Ligand strand* (500 nM) at 1:1 ratio (v/v).
- 2. Incubate the solution of step 1 at **RT** at **600 rpm** for **30 min** to ensure complete hybridization.
- 3. Mix solution of step 2 and **Adapter strand 2 Ra Ifs** (200 nM) at 1:1 ratio (v/v).

Solution is ready to use for biochip functionalization.

Stability of the solution is related to the stability of the ligand molecule.

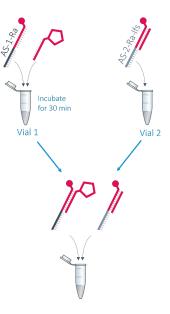


Table 2. Additional material for functionalization of spot 1 and reference spot 2.

Material	Concentration	Buffer	Related Product Name	Order No
Ligand strand	500 nM	PE40 <sup>[2]</sup>	heliX <sup>®</sup> Amine Coupling Kit 1	HK-NHS-1
carrying the conjugated ligand				

#### **Example**

Required volume for 3 functionalizations: 100 µL with a final concentration of 100 nM.

Vial 1	Vial 2	
Adapter strand 1 - Ra (400 nM)	Conjugated <i>Ligand strand</i> (500 nM)	<b>Adapter strand 2 - Ra - Ifs</b> (200/250 nM)
25 μL	25 μL	50 μL

After incubation time, mix vial 1 and vial 2 to obtain 100 μL of ready-to-use DNA solution.



#### **Contact**

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<sup>[1]</sup> TE40: 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50  $\mu$ M EDTA, 50  $\mu$ M EGTA