

NTA kit 1

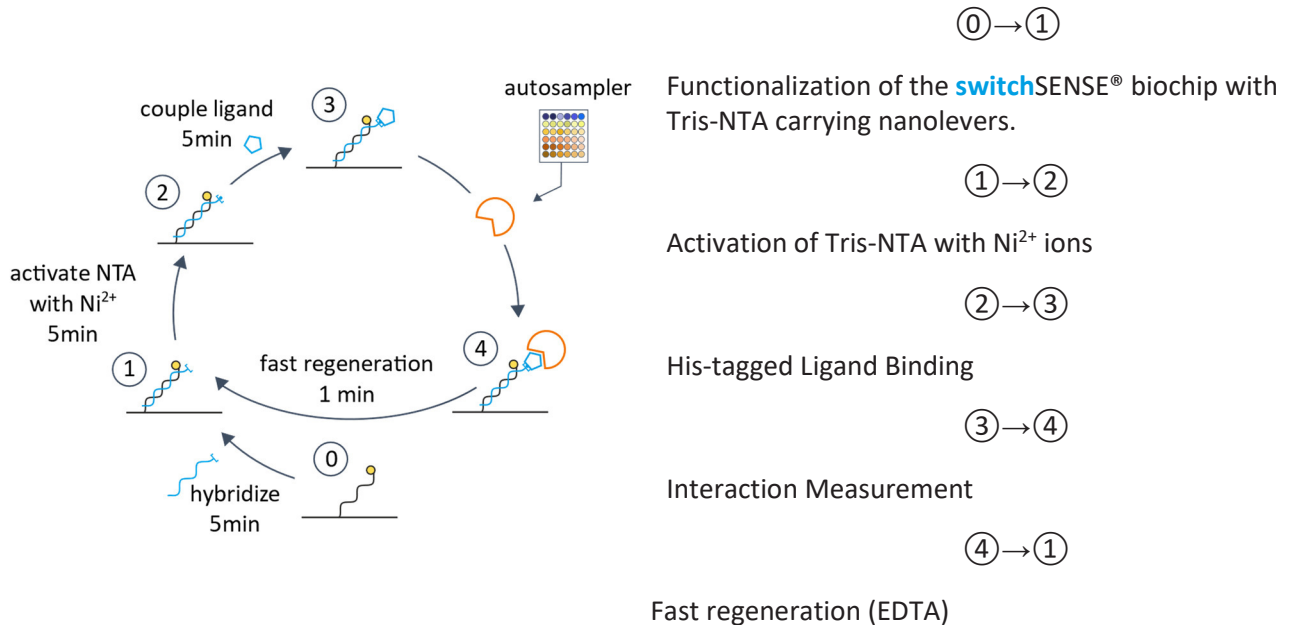
Tris-NTA reagents for capturing His-tagged molecules with B48mer

Key Features

- Capturing of His-tagged peptides and proteins
- Compatible with all **switch**SENSE®
Multi-purpose biochips carrying sequence A48 and B48
- Suitable for parallel measurements via DNA encoded addressing
- Includes reagents for 20 x 10 functionalizations

Workflow Overview

Workflow Overview with Tris-NTA nanolevers – normal regeneration



Important Notes

- His-tagged proteins slowly dissociate from Tris-NTA. Hence, very slow dissociations ($k_{\text{OFF}} < 1\text{E-}3\text{s}^{-1}$) cannot be measured with this set-up.
- For fast regeneration the surface will be regenerated by washing with 100 mM EDTA to remove the His-tagged protein but keep the Tris-NTA.
- For more information please email to support@dynamic-biosensors.com.

Product Description

Order Number **CK-TN-1-B48** (nanolever sequence B48)

TABLE 1 | Contents and storage information

Material	Cap	Amount	Storage	Comment
cNL-A48 (400 nM in TE40 ¹)	yellow	4 x 100 µL	-20°C	
cNL-B48-NTA (400 nM in TE40 ¹)	red	20 x 20 µL	-20°C	
EDTA solution (100 mM)	trans- parent	5 x 1.5 mL	-20°C	
Loading solution	trans- parent	5 x 1.5 mL	-20°C	

For *in vitro* use only.

Please check date of expiry on the kit. Products are shipped at ambient temperature.
The kit contains reagents sufficient for 20 new hybridizations and 200 fast regenerations.

¹ 10 mM Tris, 40 mM NaCl, 0.05 % Tween20, 50 µM EDTA, 50 µM EGTA

Assay Setup in switchBUILD

Setup a Kinetic Experiment with His-tag Capture

Properties Autosampler

Immobilization: **His-tag Capture** ⓘ

Measurement: **Dynamic Mode** ⓘ

Ligand: **cNL-B48-NTA** Concentration: **200** nM Mol. Weight: **1** kDa

Tagged: **His-tagged protein** Concentration: **500** nM Mol. Weight: **50** kDa

Analyte: **Analyte** Mol. Weight: **50** kDa

Capture: **Interaction**

Predicted Interaction (between 'His-tagged protein' and 'Analyte') **PRESETS**

K_D : **5.0E-10** M

k_{ON} : **6.0E+06** $M^{-1} \cdot s^{-1}$

k_{OFF} : **3.0E-03** s^{-1}

Experimental Parameters **AUTO GENERATE**

Associate: **3** concentrations, starting from **5.0E-09** M with subsequent concentrations diluted by a factor **3**

Association volume: **250** μ l with **50** μ l/min for **5** min with blank run ⓘ

Dissociation volume: **838** μ l with **SP: 50** μ l/min for **16.76** min with blank run

Temperature: **25** $^{\circ}$ C

Measurement Spots

Association: (1) (2) (3) (4) (5) (6)

Stopped Flow: (1) (2) (3) (4) (5) (6)

Dissociation: (1) (2) (3) (4) (5) (6)

with Regenerations ⓘ

perform as Sizing ⓘ

only last concentration ⓘ

ADVANCED

1) Select "His-tag Capture" as immobilization method.

→ The ligand will automatically update to cNL-B48-NTA.

2) Enter the name and concentration of the his-tagged protein.

3) Set up the interaction of interest in the "Interaction" tab.

4) When "with regeneration" is tagged, an EDTA regeneration will be performed removing the his-tagged protein from the surface. This is followed by a re-activating the NTA surface and immobilization of fresh ligand protein.

Setup a Sizing Experiment with His-tag Capture

Properties Autosampler

Immobilization: **His-tag Capture** ⓘ

Measurement: **Dynamic Mode**

Sample 1: **His-tagged protein** Concentration: **100** nM Mol. Weight: **20** kDa ⓘ

Measurement Spots

Stopped Flow: (1) (2) (3) (4) (5) (6) ⓘ

perform as Sizing

ADVANCED

1) Select "His-tag Capture" as immobilization method.

My Notes

My Notes

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Contact

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Order Information

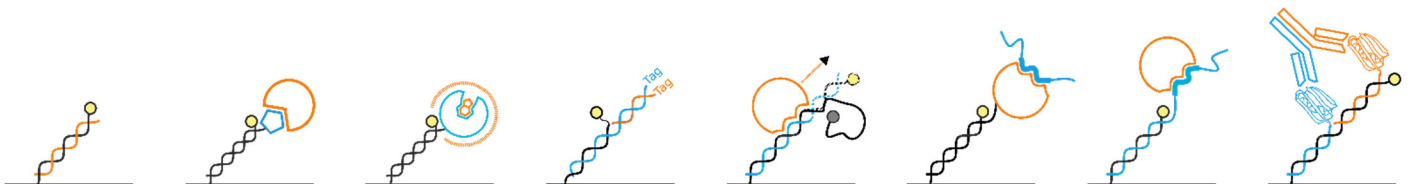
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switchSENSE® is a proprietary measurement technology by Dynamic Biosensors GmbH. Instruments and biochips are engineered and manufactured in Germany.

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