



# Certificate of Analysis

|                 |                   |
|-----------------|-------------------|
| Lot             | 20250924 / FRM045 |
| Reference #     | MBIO-8246         |
| Amount per vial | 0.1 mg            |

## MBIO-8246 (DYKDDDDK Tag NovoBody™ Duo, 6X His Tag)

### Description

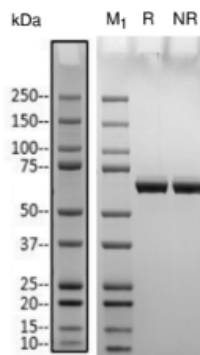
|                         |  |
|-------------------------|--|
| <b>Molecule</b>         | Novobody™ Duo, C-terminal 6xHis tag                    |
| <b>Source</b>           | Expressed in CHO cells, Purified via HisTrap™ FF Crude |
| <b>Target</b>           | Internal/External FLAG tag (DYKDDDDK epitope)          |
| <b>Characterization</b> | SDS-PAGE, SEC-HPLC, BioLayer Interferometry            |

### Specifications

|                            |                            |
|----------------------------|----------------------------|
| <b>Physical Appearance</b> | White Powder               |
| <b>Molecular Weight</b>    | 60237.89 Da                |
| <b>Buffer Conditions</b>   | PBS, 10% Trehalose, pH 7.2 |

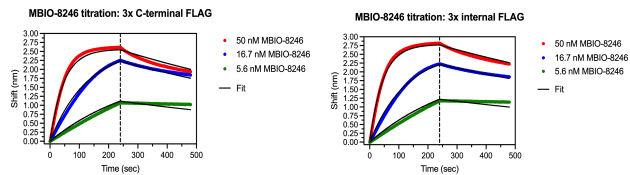
#### SDS-PAGE

Gel analysis of final purified sample after nickel affinity purification. Sample appears at the expected molecular weight.



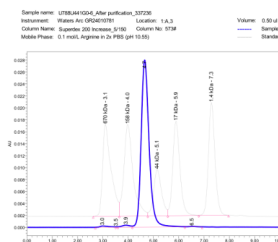
#### BioLayer Interferometry

Sample binds target analyte with an estimated  $K_d$  of 2.4 nM,  $K_{on}$  of  $4.11E005$  1/Ms and  $K_{off}$  of  $1.00E-003$  1/s when a biotinylated 3x C-terminal FLAG tagged analyte is loaded onto GatorBio Streptavidin probes and MBIO-8246 is titrated at 50, 16.7, and 5.6 nM (left). Sample binds target analyte with an estimated  $K_d$  of 2.0 nM,  $K_{on}$  of  $4.23E005$  1/Ms and  $K_{off}$  of  $8.41E-004$  1/s when biotinylated 3x Internal FLAG tagged analyte is loaded onto GatorBio Streptavidin probes and MBIO-8246 is titrated at 50, 16.7, and 5.6 nM (right).



#### SEC-HPLC

Size exclusion chromatography coupled with high performance liquid chromatography demonstrates that the sample elutes at the expected molecular weight and is >95% monomer.



#### Shipping, Storage, and Handling

The product is shipped ambient. Upon receipt, immediately store lyophilized protein aliquots at  $-20^{\circ}\text{C}$  with desiccant. Reconstitute each aliquot with 100  $\mu\text{L}$  of sterile deionized water to a stock solution of 1.00 mg/ml (16.81  $\mu\text{M}$ ). Solubilize at room temperature with gentle mixing, do not vortex. It is strongly recommended to sub-aliquot and store samples at  $-80^{\circ}\text{C}$  for further testing. Limit freeze thaws to 2 total cycles. The expected stability for this product is 12 months when the reconstituted sample is stored at  $-80^{\circ}\text{C}$  under sterile conditions. If an exact concentration is desired, Nanodrop (A280) the protein using the following Extinction Coefficient: 94660  $\text{M}^{-1}\text{cm}^{-1}$ .