

# Poly FLAG Peptide lyophilized powder(3X Flag peptide)

## **Description**

Poly FLAG Peptide lyophilized powder(3X Flag Peptide) is a polypeptide composed of 23 amino acids with a molecular weight of 2864 Da, which can bind Anti-Flag antibody through competition, so that the antibody bound to Anti-Flag antibody can be eluted during immunoprecipitation Flag fusion expression protein. The motif Asp-Tyr-Lys-Xaa-Xaa-Asp in the polypeptide is repeated three times, and the 8 amino acids at the carbon-terminus constitute the classic Flag tag (Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Asp-Lys).

#### **Properties**

| Appearance (Color)                | White   |
|-----------------------------------|---|
| Appearance (Form)                 | Powder  |
| Form                              | Lyophilized Powder  |
| Purity by HPLC-MS                 | 95.33 %   |
| Concentration                     | (Recommended working concentration is 200-400<br>μg/mL for elute FLAG fusion proteins from<br>the Anti-DYKDDDDK (FLAG) beads. |
| Shipped in<br>Storage Temperature | Blue ice  |
|                                   | 2-8°C   |

# **Application**

For use in competitive elution of DYKDDDDK (FLAG) fusion proteins from the ANTI-FLAG monoclonal antibody in solution or bound to agarose on the Anti-DYKDDDDK (FLAG) beads.

## **Notice**

- 1. Read the User Manual carefully before the first use;
- 2. Avoid freezing, drying and high-speed centrifugation during use and storage of beads;
- 3. This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

## **Procedure**

1. Thoroughly suspend the Anti-Flag beads in the vial, for a uniform suspension of the resin. Quickly transfer  $10\mu$ l of the gel suspension (about  $5\mu$ l of packed gel volume) to a fresh tube.

2. Add 0.6 mL TBS. Thoroughly suspend the Anti-Flag beads by pipetting. Centrifuge the resin at 5000 rpm for 30 seconds and carefully remove the supernatant. Be sure to remove all of the wash buffer without discarding the resin. Repeat 3-4 times.

3. Add 500  $\mu\text{L}$  of cell periplasmic extracts to the washed resin.

4. Gently agitate samples for 2 hours at 4°C.

5. Centrifuge the resin for 30 seconds at 5000 rpm. Transfer the supernatants to a fresh tube.

6. Wash the resin with 0.5mL TBS until the OD280 of the supernatant reads<0.05.

7. Elution of DYKDDDDK (FLAG) Fusion Protein by Competition with Poly DYKDDDDK (FLAG) Peptide. Elute the bound DYKDDDDK (FLAG) Fusion Protein by competitive elution with five one-column volume aliquots of a solution containing 200-400 ug/mL Poly DYKDDDDK (FLAG) Peptide in TBS.

#### 8. Recycle the Anti-DYKDDDDK (FLAG) beads.

Poly DYKDDDDK (FLAG) Peptide may not elute all of the DYKDDDDK (FLAG) Fusion Protein bound to Anti-DYKDDDDK (FLAG) beads. It is recommended the Anti-DYKDDDDK (FLAG) beads be regenerated immediately after use by washing with three 5 mL aliquots of 0.1 M glycine HCl, pH 3.5. The gel should be immediately re-equilibrated in TBS until the effluent is at neutral pH. Note: Do not leave the Anti-DYKDDDDK (FLAG) beads in glycine HCl for longer than 20 minutes.

#### 9. Store the Anti-DYKDDDDK (FLAG) beads

Wash the Anti-DYKDDDDK(FLAG) beads three times with 5 mL of 50% glycerol with 10mM sodium phosphate, 150 mM sodium chloride, pH 7.4, containing 0.02% (w/v) sodium azide. Then add another 5 mL of 50% glycerol with 10 mM sodium phosphate, 150 mM sodium chloride, pH 7.4, containing 0.02% (w/v) sodium azide and store at -20°C without draining.

#### Storage

Store the product at 2-8°C for 2 years.

