Maleimide Activated OVA

CATALOG NO: M1318-2 2 mg
M1318-10 10 mg

MOL. WEIGHT: ~ 45,000 Daltons

pH: 7.0 ± 0.2

ACTIVATION METHOD: Sulfo-SMCC

BINDING CAPACITY: ~2-4 mg of peptide (average MW of 1000 - 3000) per 2 mg OVA

FORM: Off-white powder

RECONSTITUTION: Reconstitute in distilled water at the concentration of 2-5 mg/ml with gentle stirring.

STORAGE CONDITION: Lyophilized Maleimide-activated OVA should be stored at -20°C and is stable for 1 year. Reconstitute right before use.
Note: **Use the reconstituted protein immediately. Do not store it.**

DESCRIPTION: Maleimide Activated OVA commonly used as a carrier protein for haptens (small molecules/low molecular weight molecules and peptides) in order to enable the immune response to the small molecules. BioVision's maleimide activated OVA produced by pre-activation with hetero bi-functional cross linker Sulfo-SMCC which facilitates the peptides and ligands that contain sulfhydryl (-SH) groups to bind covalently to activated carrier protein.

PROTOCOL:

PROCEDURE FOR PEPTIDE CONJUGATION:

1. Dissolve the sulfhydryl-containing hapten in 0.2-0.5 ml of phosphate buffer pH 7.2.
   Note: For haptens with limited solubility in phosphate buffer add DMSO for solubility purpose (do not exceed DMSO 15% of total volume). Alkaline pH values (above 8.5) may hydrolyze the maleimide group or generate side reactions with amines. Haptens must contain cysteine or a sulfhydryl group in the reduced state in order to react efficiently with the maleimide group.

2. Thaw the Maleimide Activated OVA at room temperature and dissolve it in distilled H_2O right before use.
   Note: Do not vortex or heat the activated OVA.

3. Immediately mix the peptide (2.5 mg) with activated BSA (2.5 mg) and incubate at room temperature for 2 hrs. under occasional mixing.

4. Peptide-conjugated OVA can be purified by gel filtration or dialysis to remove excess peptide
   Note: If the immunogen is to be stored for > 2 weeks, it is recommended to store frozen at -20°C. The Hapten-OVA can be stored at -20 for more than 6 months. Avoid repeated freeze-thaw.

5. The coupling efficiency of conjugation can be determined by assaying the content of free sulfhydryl groups in the unreacted peptide using Sulfo-SMCC reagent.

RELATED PRODUCTS:

- Maleimide Activated BSA **(Cat. No. M1316)**
- Maleimide Activated KLH **(Cat. No. M1317)**

FOR RESEARCH USE ONLY! Not to be used on humans.

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