Maleimide Activated cOVA *Optimized for Maximum Immunization Response*

Catalog Number: 5610
Unit Size: 3 x 2 mg

Product Details

Storage Conditions	Freeze (< -15 °C),
Expiration Date	12 months upon recieving

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	Water

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Maleimide Activated cOVA is a sulfhydryl-reactive form specifically designed for efficient hapten-carrier conjugation with cysteine-containing peptides and other thiolated antigens. This product consists of purified cationized ovalbumin (cOVA) that has been modified with an SMCC crosslinker to introduce maleimide groups. These groups facilitate the formation of stable covalent bonds with sulfhydryl groups on cysteine residues, enabling precise conjugation and the attachment of multiple antigens per carrier molecule without epitope interference. Cationized Ovalbumin (cOVA) is synthesized by treating native ovalbumin with ethylenediamine, which replaces the majority of negatively charged carboxyl groups with positively charged primary amines. This modification results in a highly positively charged cOVA, significantly enhancing the immunogenicity of the ovalbumin. Additionally, the increase in primary amines provides more conjugation sites for hapten molecules, thus enhancing the versatility of standard conjugation techniques. Despite being more hydrophobic and less soluble in aqueous buffers than Bovine Serum Albumin (BSA), cOVA maintains solubility in up to 70% DMSO. This characteristic makes it particularly useful for conjugation with haptens that require DMSO for solubility.