

Maleimide Activated hOVA *Optimized for Maximum Immunization Response*

Catalog Number: 5611

Unit Size: 5 x 1 mg

Product Details

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

Chemical Properties

Appearance	Solid
Molecular Weight	N/A
Soluble In	Water

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

Maleimide-activated hOVA is a sulfhydryl-reactive derivative designed for optimal hapten-carrier conjugation with cysteine-containing peptides and other thiolated antigens. This product consists of purified ovalbumin (cOVA) modified with an SMCC crosslinker, introducing maleimide groups that form stable covalent bonds with sulfhydryl groups on cysteine residues. This modification ensures precise conjugation, allowing the attachment of multiple antigens per carrier molecule without epitope interference. Hexamethylenediamine-modified ovalbumin (hOVA) is produced by treating native ovalbumin with hexamethylenediamine, replacing most negatively charged carboxyl groups with positively charged primary amines. This modification yields a highly positively charged hOVA, significantly enhancing the immunogenicity of the ovalbumin. Furthermore, the increased number of primary amines provides additional conjugation sites for hapten molecules, thus improving the versatility of standard conjugation techniques. Despite its increased hydrophobicity and reduced solubility in aqueous buffers compared to Bovine Serum Albumin (BSA), hOVA remains soluble in up to 70% DMSO. This solubility makes it particularly suitable for conjugation with haptens requiring DMSO for solubility.