

# Medetomidine KLH Conjugate

Catalog Number: 50656

Unit Size: 1 mg

## Product Details

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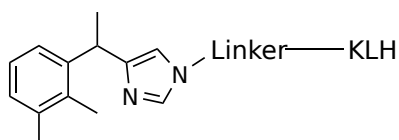
Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

## Chemical Properties

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Appearance	Solid
Molecular Weight	N/A
Soluble In	DMSO

Chemical Structure



## Spectral Properties

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Excitation Wavelength	N/A
Emission Wavelength	N/A

## Applications

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Medetomidine-KLH conjugate is a hapten-protein complex designed to facilitate the generation of anti-medetomidine antibodies and the development of immunoassays for detection and quantification of medetomidine. As a small-molecule  $\alpha$ 2-adrenergic agonist, medetomidine is non-immunogenic and requires conjugation to a carrier protein to elicit an adaptive immune response. In this construct, medetomidine is covalently linked to keyhole limpet hemocyanin (KLH), a high molecular weight, immunostimulatory protein frequently used in antibody production due to its strong T-cell dependent antigenicity. The conjugation process is optimized to maintain hapten integrity and maximize epitope availability, supporting high-affinity antibody generation. This reagent is well-suited for use in the development of polyclonal and monoclonal antibodies, as well as in competitive ELISA and other immunoanalytical assays. The conjugate is supplied in a lyophilized or buffered solution format to ensure stability and reproducibility. Custom conjugation formats, alternative carrier proteins, or specific hapten densities can be provided upon request to support specialized assay development or immunization protocols.