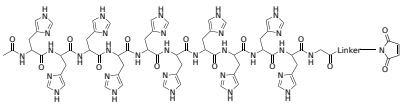
10XHis maleimide

Catalog Number: 12641
Unit Size: 1 mg

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	24 months upon receiving

Chemical Properties

Appearance	Solid off-white
Molecular Weight	1709.78
Soluble In	DMSO
Chemical Structure	

Spectral Properties

Excitation Wavelength	N/A
Emission Wavelength	N/A

Applications

10XHis maleimide is an excellent building block to make 10XHis conjugates for developing His tag detection probes and purification tools. It readily reacts with a biomolecule that contains a thiol group such as antibodies, peptides and thiol-modified oligos. The 10XHis tag is one of the most common His tags and has a molecular weight of ~2kDa. His-tags (i.e., polyhistidine tags) comprise a consecutive series of six to ten histidine residues. His tags are used for many recombinant proteins to facilitate purification, allowing researchers to extract a protein of interest from thousands of other proteins found in a cell or cell lysate. The small size of the 10X-His tag has a lower possibility for the tag to affect the functionality of the fusion protein. Histidine forms coordination bonds with immobilized transition metal ions, and this property can be utilized for protein purification. His-tag protein purification is by a specialized form of affinity chromatography, called immobilized metal affinity chromatography (IMAC), where proteins or peptides are separated according to their affinity for metal ions immobilized to a solid chelating resin. During this process, a small His-tag is fused to either the N or C terminus of the target protein, enabling capture by nickel or cobalt ions coordinated on a variety of resins. The small size, low cost, and ease of use have made the His-tag the most popular affinity-tag available. AAT Bioquest offers the largest collection of 6XHis, 0XHis, NTA, bis-NTA, tris-NTA and IDA reagents for His Tag detections and purifications.