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Sulfamethazine–BSA Conjugate HL Lyophilized powder, 1 mg conjugate per tube, ≥99% conjugates by HPLC

Product Number: CM52136



Product Description

Sulfamethazine (SMZ) was first approved as an antibacterial drug in 1947 due to its ability to inhibit bacterial dihydropteroate synthase. SMZ belongs to a class of antibiotics called sulfonamides which are widely used in veterinary medicine and the livestock industry. This sulfamethazine—BSA conjugate is a highly loaded (HL) conjugate with an average of 25 to 35 SMZ molecules per BSA and can be used for immunization or immunoassay development. Sulfamethazine is coupled to BSA via its surface amines. The final conjugate is supplied in a lyophilized form containing phosphate buffered saline (PBS) and sugar-based stabilizers. This process makes the conjugates more stable for storage and shipment.

The product is sold as either 1 vial of 1 mg (Cat# CM52136-1MG) or 5 vials of 1 mg (Cat# CM52136-5MG). For bulk orders, please contact us for a quote.

Application

- Assay development for detection of sulfamethazine contaminants
- Determining sulfamethazine specificity of mAbs vs other sulfonamides
- Antibody discovery via immunization
- Indirect and competitive ELISA Assay

Key Features

- Lyophilized powder ready to use after reconstitution with non-pyrogenic deionized water, no need for external buffer.
- Highly loaded conjugates with an average 25-35 SMZs per BSA
- Concentration accurately determined by UV/HPLC analysis.

Storage/Stability

- Recommended storage of the product is below -20°C
- Expiration before reconstitution is 1 year after receiving.
- Once reconstituted maintain at 2-8°C
- For best quality use within 1 week of reconstituting. Do not freeze once reconstituted.

References

- Wang, Z. *et. al.* Heterologous structure of coating antigen on sensitivity of ELISA for sulfamethazine: evidence from molecular similarity analysis, *Food and Agricultural Immunology*, **2011**, 22:2, 115-124, DOI: 10.1080/09540105.2010.533752
- Li, X. *et. al.* Development of immunoassays for the detection of sulfamethazine in swine urine, *Food Additives & Contaminants: Part A*, **2009**, 26:3, 314-325 DOI: 10.1080/02652030802520860.