

Ver. HB221031

Dextran Sulfate Sodium Salt (DSS) MW: 36,000~50,000

Product description

Dextran sulfate sodium salt (DSS) is a polyanionic derivative of dextran produced by esterification of Dextran with chlorosulphonic acid. The sulfur content is approximately 17% which corresponds to an average of 1.9 sulfate groups per glucosyl residue of the dextran molecule. DSS has several characteristics: 1) polyanionic complex, soluble in water, forming a colorless aqueous solution; 2) high purity and good stability; 3) can be degraded naturally.

Inflammatory bowel disease (IBD) is a chronic, relapsing gastrointestinal infection that increases the risk of intestinal tumors, mainly including UC and Crohn disease (CD). In 1985, after the hamster ulcerative colitis model was first prepared by using DSS, a large number of studies have proved that the DSS colitis model is similar to human ulcerative colitis. The histological features, clinical manifestations, the disease site, and cytokine proliferation of DSS colitis model are very similar to human ulcerative colitis (UC). The modeling conditions and operation methods of this model are simple, the expenditure is very cheap, the repeatability is good, and it is easy to master and popularize. The DSS concentration and dosing time can be adjusted according to the experimental purpose to establish acute, chronic and acute-chronic alternation models.

Components

Components No.	Name	60316ES25	60316ES60	60316ES76	60316ES80
60316	Dextran Sulfate Sodium Salt (DSS) MW: 36,000~50,000	25 g	100 g	500 g	1 kg

Specifications

English synonym	Dextran Sulfate Sodium Salt, DSS; Dextran Sodium Sulfate		
CAS NO.	9011-18-1		
Formula	(C ₆ H ₇ Na ₃ O ₁₄ S ₃)n		
Appearance	White or off-white powder		
Solubility	Soluble in water, slightly soluble in ethanol.		
Structure	NaO-S-OMMO-IN-ONA O IN-ONA O IN-ONA O IN-ONA O IN-ONA O IN-ONA		

Shipping and Storage

The product is shipped and stored at room temperature, valid for two years.



Instructions

Dissolution method

Soluble in water (100 mg/mL clear or slightly hazy yellow solution). The specific concentration used should be determined according to the type of modeling, referring to relevant literature or through preliminary experiments.

Notes

Please wear the necessary PPE, such lab coat and gloves, to ensure your health and safety! For research use only!