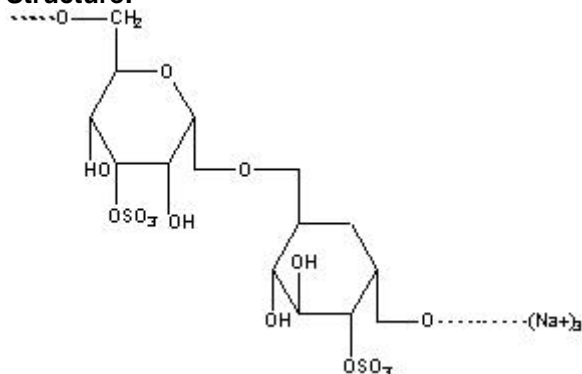


## TECHNICAL INFORMATION

Catalog Number: 101516, 101518, 150821, 160110, 160111, 193992

### Dextran sulfate sodium salt

#### Structure:



CAS # : 9011-18-1

**Physical Description:** White to off-white powder

**Description:** Dextran sulfate 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.

#### Typical Uses:

- Increases hybridization rate of nucleic acids - in the presence of 10% dextran sulfate the rate of reannealing of DNA in solution was increased by about 10 times.<sup>15</sup> This observation was later extended to the hybridization of single or double-stranded probes to DNA or RNA immobilized on filter paper.<sup>9,16</sup> The addition of 10% dextran sulfate may increase the rate of hybridization of randomly cleaved double-stranded DNA probes to immobilized nucleic acids by as much as 100 times.<sup>16</sup>
- Shows immunologically relevant activities:
  - enhancement and suppression of humoral immunity<sup>3,4</sup>
  - polyclonal activation of B-lymphocytes, stimulating even immature B cells<sup>6</sup>
  - changes in thymocyte reactivity to lectins<sup>1</sup>
  - inhibition of blood coagulation and platelet aggregation<sup>11</sup>
  - enhancement of blood fibrinolytic activity<sup>11</sup>
  - enhancement/suppression of cell-mediated immune responses.<sup>2,10</sup>
- Precipitates LDL and VLDL lipoproteins - in the presence of magnesium ions, dextran sulfate precipitates low-density lipoproteins from human serum leaving the high-density lipoproteins in the supernatant. Removal of lipoproteins by dextran sulfate precipitation may be useful in the purification of other materials such as beta2-glycoprotein.<sup>8</sup>
- Shows activity as an adjuvant

#### Availability:

Catalog Number	Description	Size
101516	Dextran Sulfate Sodium Salt, Reagent Grade; Average molecular weight: 8000	1 g 10 g 50 g 100 g
101518	Dextran Sulfate Sodium Salt; Average molecular weight: 6000 - 8000	1 g 10 g 50 g 100 g

150821	Dextran Sulfate Sodium Salt; Average molecular weight: 1,400,000 made from Dextran molecular weight: 500000	1 g 10 g 50 g 100 g 500 g
160110	Dextran Sulfate Sodium Salt, Colitis Grade; Average molecular weight: 36000 - 50000	1 g 10 g 50 g 100 g 500 g
160111	Dextran Sulfate Sodium Salt; Average molecular weight: 400000 - 600000	1 g 10 g 50 g 100 g
193992	Dextran Sulfate Sodium Salt, molecular biology reagent; Average molecular weight: 1,400,000	1 g 10 g 50 g 100 g 500 g

**Solubility:** Soluble in water (100 mg/ml - clear to slightly hazy yellow solution. Higher molecular weight products may not be as soluble in water as the lower molecular weight products.). Aqueous solutions should be buffered with (e.g. with sodium bicarbonate) before autoclaving to prevent decomposition.<sup>17</sup>

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