



## Product Information

### PMMA agent, Chondroitin sulfate-polymethyl methacrylate, Purity $\geq 95\%$

**Cat. No.:** X25-05-YM020

**Size:** 100 mg; 250 mg; 500 mg; 1 g; 5 g

**Synonym:** Polymethyl methacrylate-chondroitin sulfate; PMMA-chondroitin sulfate; Chondroitin sulfate-PMMA

**This product is for research use only and is not intended for diagnostic use.**

#### Product Information

|                         |   |
|-------------------------|---|
| <b>Description</b>      | PMMA-chondroitin sulfate copolymer is synthesized through radical polymerization, embedding chondroitin sulfate within polymethyl methacrylate's structural framework without chain scission.   |
| <b>Glycan Name</b>      | Chondroitin sulfate   |
| <b>Glycan Structure</b> | The glycan structure of chondroitin sulfate (CS) is a sulfated glycosaminoglycan (GAG) composed of repeating disaccharide units. Each unit consists of: N-acetyl-D-galactosamine (GalNAc) ( $\beta 1 \rightarrow 4$ linked) D-glucuronic acid (GlcA) ( $\beta 1 \rightarrow 22$ linked) |
| <b>Source</b>           | Chemical synthesis  |
| <b>Functional Group</b> | PMMA  |
| <b>Form</b>             | Solid or powder   |
| <b>Purity</b>           | $\geq 95\%$   |
| <b>Impurities</b>       | No visible impurities to the naked eye.   |
| <b>Solubility</b>       | This product is soluble in most organic solvents, such as DCM, DMF, DMSO, and THF, and exhibits excellent solubility in water.  |
| <b>Identity</b>         | Confirmed by NMR.   |
| <b>Stability</b>        | It is stable under its storage temperature.   |
| <b>Quality Level</b>    | Research level  |
| <b>Applications</b>     | Chondroitin sulfate-polymethyl methacrylate can be used for its potential to engineer thermoplastic blends for orthopedic implant coatings.   |
| <b>Storage</b>          | Store at $-20^{\circ}\text{C}$ , protect from light and moisture.   |