

## Product Information

### PBA agent, Chondroitin sulfate-phenylboronic acid, Purity $\geq 95\%$

**Cat. No.:** X25-05-YM010

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

**Synonym:** Phenylboronic acid-chondroitin sulfate; PBA-chondroitin sulfate; Chondroitin sulfate-PBA

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

#### Product Information

|                         |                                                                                                                                                                                                                                                                                         |
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| <b>Description</b>      | Phenylboronic acid-modified chondroitin sulfate (PBA-chondroitin sulfate) incorporates pH-responsive boronate ester linkages, enabling dynamic molecular interactions while maintaining chondroitin's inherent tissue-regenerative properties.                                          |
| <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) ( $\beta 1 \rightarrow 12$ linked) |
| <b>Source</b>           | Chemical synthesis                                                                                                                                                                                                                                                                      |
| <b>Functional Group</b> | PBA                                                                                                                                                                                                                                                                                     |
| <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-phenylboronic acid can be used for its potential to investigate boronic acid-functionalized systems for glucose-responsive release.                                                                                                                                 |
| <b>Storage</b>          | Store at $-20^{\circ}\text{C}$ , protect from light and moisture.                                                                                                                                                                                                                       |