

## Specification

### X-Glucuro CHA Salt *BioChemica*

**A1113**

|                              |   |
|------------------------------|---|
| <b>Physical Description:</b> | Solid   |
| <b>Product Code:</b>         | A1113   |
| <b>Product Name:</b>         | X-Glucuro CHA Salt <i>BioChemica</i>  |
| <b>Specifications:</b>       | Assay (TLC): min. 99 %<br>Water (K.F.): max. 5.0 %  |
| <b>WGK:</b>                  | 1   |
| <b>Storage:</b>              | -20°C<br>protected from light   |
| <b>Shipment:</b>             | wet ice   |
| <b>Molecular Formula:</b>    | C <sub>20</sub> H <sub>26</sub> BrClN <sub>2</sub> O <sub>7</sub>   |
| <b>M:</b>                    | 521.79 g/mol  |
| <b>CAS:</b>                  | 114162-64-0   |
| <b>CS:</b>                   | 29389090  |
| <b>Comment</b>               | X-Glucuro is a substrate of the β-glucuronidase. β-Glucuronidase cleaves the substrate and releases 5-Bromo-4-chloro-3-indoxyl (X). The indoxyl will be oxidized to the insoluble indigo. β-Glucuronidase is used as an alternative to β-galactosidase and chloramphenicol acetyltransferase (CAT), if the plant has no endogenous β-glucuronidase activity. The staining is performed with 1 to 2 mg/ml X-Glucuro CHA salt in 50 mM NaH <sub>2</sub> PO <sub>4</sub> , pH 7.0 between 20 minutes and several hours at 37°C (2). It is soluble in water or DMSO |
| <b>Bibliography</b>          | (1)Jefferson, R.A. <i>et al.</i> (1986) <i>Proc. Natl. Acad. Sci. USA</i> <b>83</b> , 8447-8451β-Glucuronidase from <i>E. coli</i> as a gene-fusion marker. (2)Jefferson, R.A. <i>et al.</i> (1987) <i>EMBO J.</i> <b>6</b> , 3901-3907GUS fusions\: β-Glucuronidase as a sensitive gene fusion marker in higher plants.  |
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