4-Nitrophenyl-β-D-glucuronide

Synonym: PNPG; NPG; p-nitrophenyl-β-D-glucuronide
CAS: 10344-94-2
Formula: C₁₂H₁₃NO₉
Molecular Wt: 315.2

Properties
Form: Powder
Appearance: White to Off-white
Application: Molecular Biology; Chromophore
Solubility: DMSO; Slightly soluble in Water
Typical Working Concentration: Varies with application, should be determined by end user
Storage Temp: -20 to 0°C

Application Notes
PNPG (Gus) is a chromogenic β-glucuronidase substrate. The GusA enzyme cleaves PNPG, yielding β-D-glucuronic acid and p-nitrophenol. When cleaved by GUS, p-nitrophenol has a maximum absorbance of 405nm (Aich et al., 2001) and results in a yellow coloration.

References