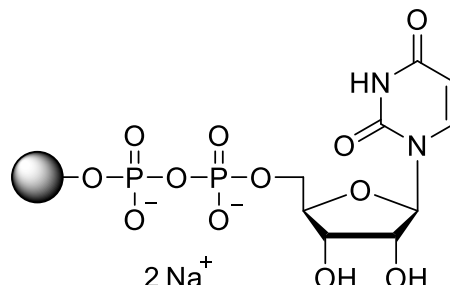


Technical Information about UDP-Gel

Immobilized Uridine-5'-O-diphosphate

Update: October 20, 2021 KN



Abbreviation: UDP-Gel (syn. UDP-Agarose)

BIOLOG Cat. No.: U 017

Description: Uridine-5'-O-diphosphate (UDP) has been immobilized on a polymeric matrix via the terminal phosphate.

Properties: UDP-Gel is suitable for the affinity purification of galactosyltransferases.

Related Products: BIOLOG also offers immobilized cytidine-5'-O-diphosphate (CDP-Gel, Cat. No. C 128) and guanosine-5'-O-diphosphate (GDP-Gel, Cat. No. G 028).

Specification: Suspension in 30 mM Na₂HPO₄ buffer (pH 7). Ligand density: approximately 5 µmol/ml of settled gel. UV: λ_{max} 262 nm/suspension in glycol.

Stability and Storage: UDP-Gel has sufficient stability for chromatography at ambient temperature and does not need special care during handling or shipment. Nevertheless, for longer storage periods the gel should be kept in the refrigerator at 4 - 8°C. **Storage buffer should contain 0.1% sodium azide for prevention of microbial growth.**

Chromatography: After equilibration with about 10 column volumes of starting buffer the affinity column is loaded with the protein solution, e.g. at 50-200 µl/min.

Recommended conditions for the purification of galactosyltransferases are:

- Binding: 25 mM MnCl₂, 25 mM MOPS, 0.1 mM DTT, pH 7.4;
- Elution: 25 mM EDTA, 150 mM Tris-HCl, 5 mM N-acetylglucosamine, 0.1 mM DTT, pH 8.4.

Regeneration of the gel may be achievable by incubation with 8 M urea or other chaotropic agents and subsequent washing with a suitable buffer.

Toxicity and Safety: Please keep in mind that the *in vivo* properties of this compound are not sufficiently characterized up to now. Avoid skin contact or ingestion and allow only trained personnel to work with it. Our products are designed, developed and sold for research purposes only. They are intended for *in vitro* and non-human *in vivo* laboratory applications. Any other use requires approval of health authorities.

Not for drug, household or related uses!

Selected References for UDP-Gel:

Sadler, J.E.; Beyer, T.A.; Oppenheimer, C.L.; Paulson, J.C.; Priels, J.P.; Rearick, J.I.; Hill, R.L., *Methods Enzymol.*, **83**, 458 - 514 (1982): "Purification of Mammalian Glycosyltransferases"