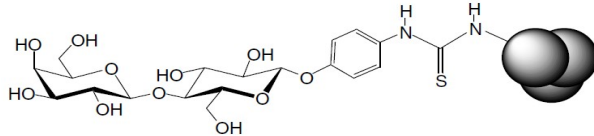


Description

Neoglycoproteins are **glycosylated bovine serum albumin (BSA)** molecules obtained after the conjugation of a phenylisothiocyanate glycosides with the ϵ -amino groups of lysine residues of BSA. The synthesis of each neoglycoprotein is conducted under a standardized procedure allowing an excellent batch to batch reliability. Each neoglycoprotein is submitted to a complete quality control ensuring a total conformity with the specifications : purity, carbohydrates/protein ratio, labeling and **functionality assessed by interactions with lectins**.

Mono and di-saccharide neoglycoproteins are **produced routinely and always available (from 0.5 mg to 50 mg)** in unlabeled or fluoresceinylated forms. **Biotinylated or other conjugates as well as more complex neoglycoproteins are available upon request.**



Intended use

Neoglycoproteins are known as “amplifiers” of carbohydrates-proteins interactions. The use of neoglycoproteins as tools to decipher glycoconjugates, carbohydrates binding proteins and more generally proteins-carbohydrates interactions were described in many studies (see bibliography). Neoglycoproteins are used in number of methods including histochemistry, ELISA assays, blotting assays, affinity chromatography, cytochemistry by flow cytometry, confocal or electron microscopy.

Neoglycoproteins can be use for research purposes to:

- **Identify lectins or lectin-like proteins.**
- **Purify lectins or other carbohydrate-binding proteins.**
- **Design new diagnostic tools.**
- **Discover biomarkers.**
- **Target drugs.**
- **Trigger immune response** against carbohydrates moieties.

Benefits

- The **affinity** of the neoglycoproteins is 10^2 - 10^4 higher than that of the corresponding free sugars.
- The neoglycoproteins are very reliable and **stable products** that can be labeled with great flexibility.
- The **high solubility** in aqueous solutions makes neoglycoproteins very powerful reagents for glycosciences studies.

Bibliography

- Cerdan *et al.* (1991). Human keratinocytes membrane lectins : characterization and modulation of their expression by cytokines. *Biol. Cell*, **73**, 35-42.
- Duverger *et al.* (1999). Interaction between lectins and neoglycoproteins containing new sialylated glycosynthons. *Glycoconjugate J.*, **16**, 793-800.
- Minwalla *et al.* (2001). Inhibition of melanosome transfer from melanocytes to keratinocytes by lectins and neoglycoproteins in an in vitro model system. *Pigment Cell. Res.*, **14**, 185-194.
- Midoux *et al.* (1987). Quantitation of the binding, uptake, and degradation of fluoresceinylated neoglycoproteins by flow cytometry. *Cytometry*, **8**, 327-334.
- Monsigny *et al.* (1984). Uptake of neoglycoproteins via membrane lectin(s) of L1210 cells evidenced by quantitative flow cytofluorometry and drug targeting. *Biol. of the Cell*, **51**, 187-196.
- Monsigny *et al.* (2007). Carbohydrate-mediated Interactions. 3.23. Neoglycoproteins. *Comprehensive Glycoscience. From Chemistry to Systems Biology*. Amsterdam, Elsevier. **3**, 477-521.

Description	Reference
β Chitobiose-BSA	NeoCT
β Chitobiose-BSA-F*	NeoCTF
α LFuc-BSA	NeoF
α LFuc-BSA-F	NeoFF
α DGal-BSA	NeoGa
α DGal-BSA-F	NeoGaF
β DGal6P-BSA	NeoGaP
β DGal6P-BSA-F	NeoGaPF
α DGalNAc-BSA	NeoGaN
α DGalNAc-BSA-F	NeoGaNf
α DGlc-BSA	NeoaG
α DGlc-BSA-F	NeoaGF
β Glc-BSA	NeobG
β Glc-BSA-F	NeobGF
β DGlcNAc-BSA	NeoGN
β DGlcNAc-BSA-F	NeoGNF
β DLac-BSA	NeolL
β DLac-BSA-F	NeolLF
α DMan-BSA	NeoM
α DMan-BSA-F	NeoMF
α DMan6P-BSA	NeoMP
α DMan6P-BSA-F	NeoMPF
α LRhamnose-BSA	NeoR
α LRhamnose-BSA-F	NeoRF

* : F = Fluoresceinylated.