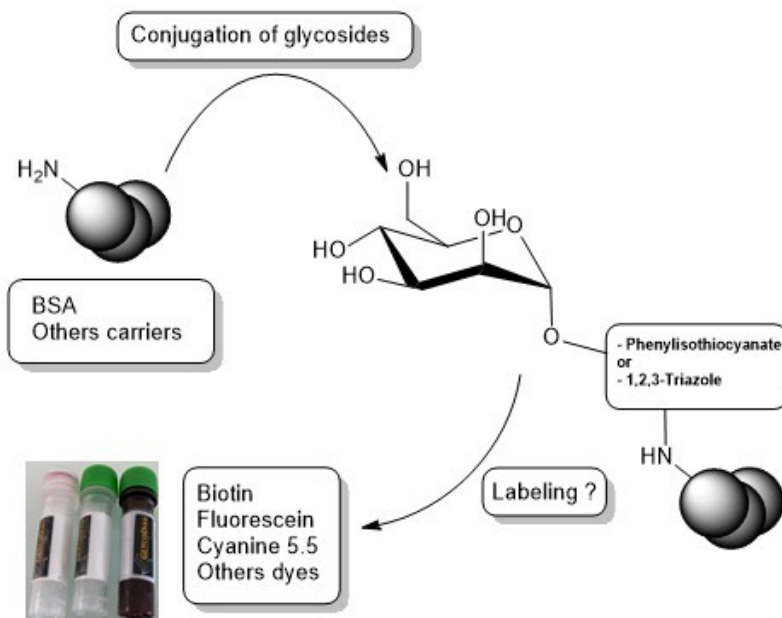


Description

Neoglycoproteins are **glycosylated bovine serum albumin (BSA)** molecules obtained either after the conjugation of a phenylisothiocyanate glycosides with the ϵ -amino groups of lysine residues of BSA or by Click Chemistry between an alkyne (or azoture) glycoside with a BSA-azoture (or BSA-alkyne). The synthesis of each neoglycoprotein is conducted under a standardized procedure allowing 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 through GLYcoPROFILE.**



Mono, di-saccharide and complex neoglycoproteins are produced routinely and always available (from 1 mg to 50 mg) in unlabeled or labeled forms (Biotin, Fluorescein, Cyanine 5.5).

See the list of neoglycoproteins available in our lab on next page

Customized neoglycoproteins with others glycoconjugates as well as others carriers are available upon request.

Intended use & Benefits

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. Indeed, neoglycoproteins are used in : histochemistry, ELISA assays, blotting assays, affinity chromatography, ITC, SPR, flow cytometry, confocal or electron microscopy.

Neoglycoproteins can be used 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.

The **avidity** of the neoglycoproteins is 10^2 - 10^4 higher than 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 powerfull reagents for glycosciences studies.

Bibliography

1. Monsigny *et al.* Biol. of the Cell, **1984**, 51, 187-196.
2. Midoux *et al.* Cytometry, **1987**, 8, 327-334.
3. Cerdan *et al.* Biol. Cell, **1991**, 73, 35-42.
4. Duverger *et al.* Glycoconjugate J., **1999**, 16, 793-800.
5. Minwalla *et al.* Pigment Cell. Res., **2001**, 14, 185-194.
6. Monsigny *et al.* Amsterdam, Elsevier. **2007**, 3, 477-521.

List of Neoglycoproteins

Mono and Di-saccharides Neoglycoproteins			
Reference	Description	Glycan structure	Coupling ratio (glycans per BSA)
NeoCT	β Chitobiose-BSA	β Chitobiose	Between 10 to 20
NeoF	α LFuc-BSA	α LFucose	Between 10 to 20
NeoGa	α DGal-BSA	α DGalactose	Between 10 to 20
NeoGaP	β DGal6P-BSA	β DGalactose-6-phosphate	Between 10 to 20
NeoGaN	α DGalNAc-BSA	α D-N-acetylgalactosamine	Between 10 to 20
NeoGaf	α Galactofuranose-BSA	α Galactofuranose	Between 10 to 20
NeoaG	α DGlc-BSA	α DGlucose	Between 10 to 20
NeobG	β Glc-BSA	β Glucose	Between 10 to 20
NeoGN	β DGlcNAc-BSA	β D-N-acetylglucosamine	Between 10 to 20
NeoGU	β DGlucuronic acid-BSA	β DGlucuronic acid	Between 10 to 20
NeoGol	Glucitol-BSA-F	Glucitol	Between 10 to 20
NeoL	β DLac-BSA	β DLactose	Between 10 to 20
NeoM	α DMan-BSA	α DManose	Between 10 to 20
NeoMP	α DMan6P-BSA	α DManose-6-phosphate	Between 10 to 20
NeoR	α LRhamnose-BSA	α LRhamnose	Between 10 to 20
NeoX	β DXylose-BSA	β DXylose	Between 10 to 20

Complex Neoglycoproteins			
Reference	Description	Glycan structure	Coupling ratio (glycans per BSA)
NeoGaliliL	Gal α 1,3Gal-BSA	Galili : Gal α 1,3Gal	Between 5 to 10
NeoNeuAcL	α NeuAc-BSA	N-acetylneuraminic acid (Neu5Ac)	Between 5 to 10
NeoNeuGcL	α NeuGc-BSA	N-glycolylneuraminic acid (Neu5Gc)	Between 5 to 10
NeoLex	Gal β 1-4(Fuca1-3)GlcNAc β 1-3GalNAc-BSA	Lewis X antigen : Gal β 1-4(Fuca1-3)GlcNAc β 1-3GalNAc	Between 5 to 10
NeoSLex	Neu5Aca2-3-Gal β 1-4(Fuca1-3)GlcNAc β 1-3GalNAc-BSA	Sialyl Lewis X antigen : Neu5Aca2-3-Gal β 1-4(Fuca1-3)GlcNAc β 1-3GalNAc	Between 5 to 10
NeoSTn	Neu5Aca6GalNAc-BSA	STn-antigen : Neu5Aca6GalNAc	Between 5 to 10
NeoT	Gal β 3GalNAc-BSA	T-antigen : Gal β 3GalNAc	Between 10 to 15
NeoTn (=NeoGaN)	α DGalNAc-BSA	Tn-antigen : α D-N-acetylgalactosamine	Between 10 to 20
Neo3'SL	3'Sialylactose-BSA	3'Sialylactose	Between 3 to 5
Neo6'SL	6'Sialylactose-BSA	6'Sialylactose	Between 3 to 5