



Nanocs™ Functional Dextrans

Introduction:

Dextrans are naturally synthesized polysaccharides with good water solubility, low toxicity and varied molecular weights. Dextrans modified with fluorescent dyes and biotins have been successfully used in numerous biological studies, such as neuronal and cell lineage tracing, intercellular communication studying, cell membrane permeability probing, fluid transport tracing and drug delivery and releasing research.

Nanocs now provides high quality, multifunctional and a wide range of fluorescent and biotin labeled dextran products for numerous *in-vitro* and *in-vivo* applications. Compared with other similar products, Nanocs functional dextrans are superior in several aspects:

Higher quality, diverse functionality

The labeling and purification methods developed by Nanocs have enabled us to synthesize high quality dextran products with high purity, long term stability as well as multiple functionalities for different biomedical applications.

Brighter, better and easy to use

Nanocs provides a wide range of fluorescent and biotinylated dextran products with molecular weight ranging from 3,000 Da to 2,000 KDa. Nanocs fluorescent dextran are significantly brighter and more photostable than most other fluorescent dextrans. These functionalized dextrans were purified by chromatography to ensure adequate applications both *in-vitro* and *in-vivo*.

Combining innovative synthesis with multiple characterization procedures, Nanocs is able to make highly fluorescent dextrans with long term stability. These fluorescent dextran products have been successfully used in *in-vivo* molecule imaging and cell tracking. With the selection of a wide range of fluorophores, Nanocs now provides fluorescent dextrans ranging from UV to near infrared region. By optimizing substitution rates of fluorophores, Nanocs is able to provide brightest dextrans ever.

Material Specifications:

Cat. No.	Item	Loading rate (dye/molecule)	Qty. (mg)
Dex 0001-1	FITC-Dextran (3,000 MW)	0.8	10
Dex 0001-2	FITC-Dextran (10,000 MW)	2	30
Dex 0001-3	FITC-Dextran (40,000 MW)	5	30
Dex 0001-4	FITC-Dextran (70, 000 MW)	20	30
Dex 0001-5	FITC-Dextran (500,000 MW)	40	10
Dex 0002-1	RB-Dextran (3,000 MW)	0.8	10
Dex 0002-2	RB-Dextran (10,000 MW)	2	30
Dex 0002-3	RB-Dextran (40,000 MW)	5	30
Dex 0002-4	RB-Dextran (70,000 MW)	20	30
Dex 0002-5	RB-Dextran (500,000 MW)	40	10
Dex 0003-1	Cy5.5-Dextran (3,000 MW)	0.8	5
Dex 0003-2	Cy5.5-Dextran (10,000 MW)	2	10
Dex 0003-3	Cy5.5-Dextran (40,000 MW)	5	10
Dex 0003-4	Cy5.5-Dextran (70,000 MW)	20	10
Dex 0003-5	Cy5.5-Dextran (500,000 MW)	40	5
Dex 0005-1	Biotin-Dextran (3,000 MW)	0.8	5
Dex 0005-2	Biotin-Dextran (10,000 MW)	2	10
Dex 0005-3	Biotin-Dextran (40,000 MW)	5	10
Dex 0005-4	Biotin-Dextran (70,000 MW)	20	10
Dex 0005-5	Biotin-Dextran (500,000 MW)	40	5
	Multifunctional Dextrans	inquire	inquire

Product Features:

- Loading rate is based on labeling molecules on each Dextran;
- Molecular weight listed refers to molecular weight of dextrans before derivatization.

Storage Conditions:

- Store in dark and refrigerated at 2~8 °C.
- Do not freeze.