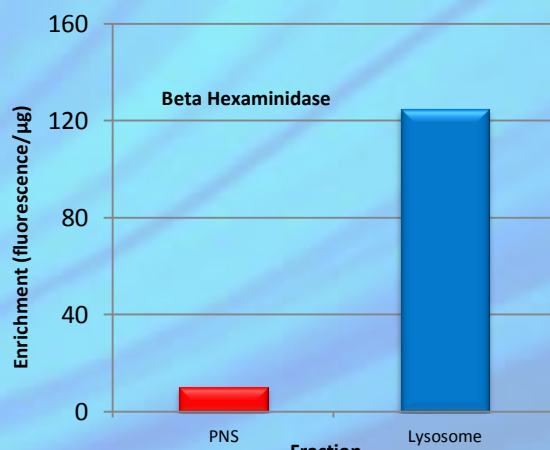
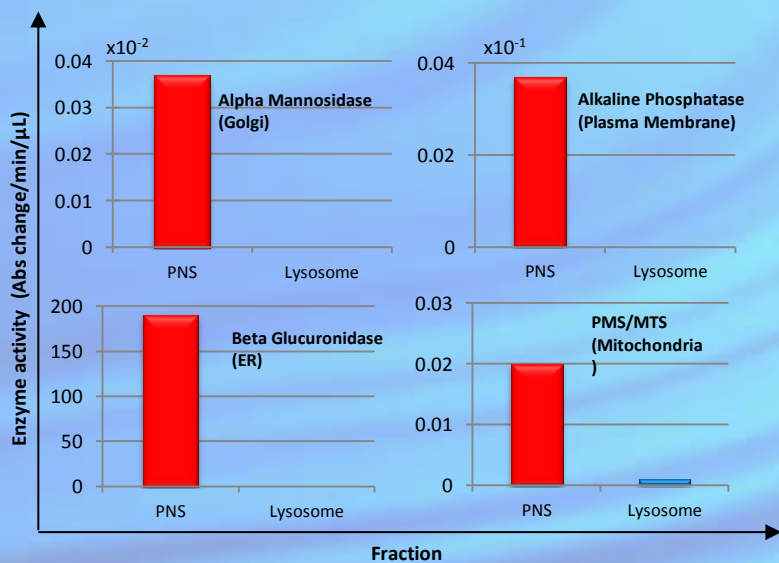
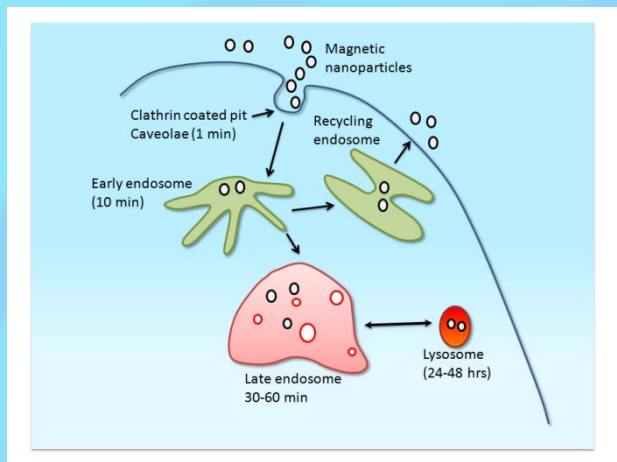


- DexoMAG[®] is dextran coated magnetite which can be used to separate subcellular compartments along the endocytotic system.
- We offer three particles which can be used to separate lysosomes.
- The lysosomes are still functional after separation as DexoMAG[®] causes no adverse reactions in the cells and allows multiple assays to be performed on a single sample.
- Using a pulse-chase experiment, DexoMAG[®] nanoparticles are internalised into the cell by the endocytotic system and finish in the lysosome.
- The lysosome can be extracted using high gradient magnetic separation (HGMS).
- Using enzyme assays it has been determined that the lysosome fraction is pure and not contaminated with other sub-cellular fractions.
- DexoMAG[®] is non-toxic to lysosomes as they retain their function after separation.



Assay to determine the presence of the lysosomal enzyme β-haxaminidase

Enzyme assays to detect contamination of organelles with lysosomes

Customised particles and colloids can prepared including different dextran molecular weights and concentration.

We are happy to accept speculative enquiries about the range of materials and expertise available in our company.

PRODUCTS RESEARCH CONSULTANCY
SUPPLIERS OF MAGNETIC FLUID FOR INDUSTRY AND RESEARCH

MENTEC, DEINIOL ROAD, BANGOR, GWYNEDD, WALES, UNITED KINGDOM, LL57 2UP

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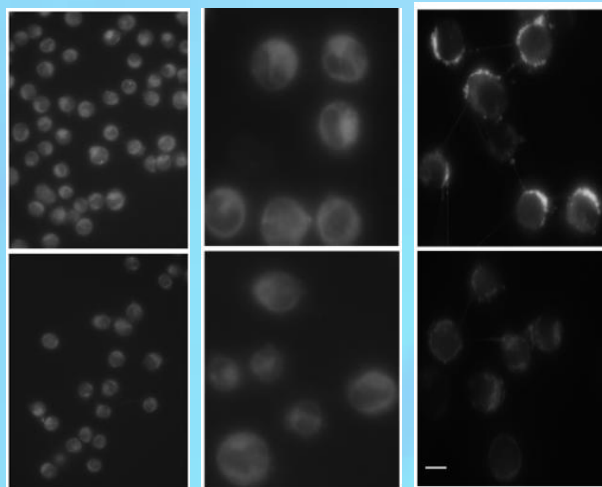
www.liquidsresearch.com



Cert No. 1773-QMS-001
ISO9001: 2008

24 hours after
treatment with
DexoMAG[®] 40

Untreated



Superoxide
formation

Lipid
peroxidation

Reactive oxygen
species

Data courtesy of Dr E. Lloyd-Evans, Cardiff University (Paper to be published)

Using dextran coated nanoparticles for separation of sub-cellular organelles does not affect the shape, structure or performance of the organelle. Testing for superoxides, Lipid peroxidation and reactive oxygen species show very little difference between untreated cells and those treated with DexoMAG[®] 40 (CHO-H1 cell line).

Products Available

Product	Dextran (kDa)	Core size (nm)	Hydrodynamic size (nm)	ζ-potential (mV)	Fe (mg/ml)	Solvent
DexoMAG [®] 40	40	8.0	50	+5	10	dH ₂ O
DexoMAG [®] 10	10	8.0	40	+5	10	dH ₂ O
DexoMAG [®] 3.5	3.5	8.0	35	+5	10	dH ₂ O

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PRODUCTS

RESEARCH

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