

Doxosome™ Control-Doxorubicin Liposomes (PEGylated)

DESCRIPTION

This is a control formulation for [PEGylated doxorubicin liposome](#). The formulation is similar to PEGylated doxorubicin liposome in size and lipid composition, but it does not contain doxorubicin drug. The formulation is for research purposes only and for the injection to laboratory animals. The formulation is made in ammonium sulfate gradient and it is ready for injection.

FORMULATION INFORMATION

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| Lipid Composition | Concentration (mg/ml) | Concentration (mM) | Molar Ratio Percentage |
|---------------------|--------------------------|-----------------------|---------------------------|
| Hydrogenated Soy PC | 9.58 | 12.22 | 57 |
| Cholesterol | 3.19 | 1.14 | 38 |
| DSPE-PEG(2000) | 3.19 | 8.26 | 5 |
| Total | 15.96 mg/ml | 21.62 mM | 100 |

| Buffers, Liposome Size and Encapsulated Drug Concentration | Specification |
|---|--------------------------|
| Inside Buffer | Ammonium Sulfate |
| Outside Buffer | Histidine/Sucrose Buffer |
| pH | 6.5 |
| Liposome Size | 80-100 nm |

APPEARANCE

Doxosome™ Control is a white translucent liquid made of nano size unilamellar liposomes. Usually due to the small size of liposomes no settling will occur in the bottom of the vial. The liposomes are packaged in an amber vial.

STORAGE AND SHELF LIFE

Storage

Doxosome™ products should always be stored at in the dark at 4 °C, except when brought to room temperature for brief periods prior to animal dosing. **DO NOT FREEZE**. If the suspension is frozen, the encapsulated drug can be released from the liposomes thus limiting its effectiveness. In addition, the size of the liposomes will also change upon freezing and thawing.

Shelf Life

Doxosome™ is made on daily basis. The batch that is shipped is manufactured on the same day. It is advised to use the products within 4 months of the manufacturing date.

REFERENCES AND BACKGROUND READING

1. [Hermanson GT. Bioconjugate techniques. Academic press; 2013 Jul 25.](#)
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4. [Yan L, Crayton SH, Thawani JP, Amirshaghghi A, Tsourkas A, Cheng Z. A pH-Responsive Drug-Delivery Platform Based on Glycol Chitosan-Coated Liposomes. Small. 2015 Oct 1;11\(37\):4870-4.](#)
5. [Silva-López EI, Edens LE, Barden AO, Keller DJ, Brozik JA. Conditions for liposome adsorption and bilayer formation on BSA passivated solid supports. Chemistry and physics of lipids. 2014 Oct 31;183:91-9.](#)
6. [Hazra M, Singh SK, and Ray S. Surface Modification of Liposomal Vaccines by Peptide Conjugation. Journal of PharmaSciTech, 2011; 1\(1\): 41-47.](#)