

Clophosome® - Lyophilized Neutral Clodronate Liposomes (5mL)

Lyophilized Clophosome® is developed by FormuMax to satisfy the demand for clodronate liposomes with long shelf-life. We offer one year shelf-life guarantee from the time of delivery to the date of reconstitution. Just reconstitute by adding sterile pure water and mix. It can be used after 10 min.

Clophosome® offers highly efficient *in vivo* macrophage depletion. Clodronate molecules are encapsulated in small MLV liposomes for superior activity, physical and chemical stability, and convenience of use. It is formulated to exceptionally high clodronate/lipid ratio and liposome encapsulation efficiency of clodronate. The product is suitable for dosing with various routes including intravenous, intraperitoneal, subcutaneous, intranasal, intratracheal etc. A starting dose of 0.15 - 0.2 mL (*i.v.* or *i.p.*) for 25g animal body weight is recommended. Optimization is recommended for specific applications.

ALWAYS CLEAN WITH ALCOHOL AND DO NOT REUSE THE NEEDLES

Animals become sensitive to infection when macrophages are depleted and the immune system is compromised. It is extremely important to conduct the injection in a clean environment particularly for long-term depletions. Withdraw the liposomes through the rubber stopper (clean with alcohol first) with a new sterile needle. Always clean the injection site with alcohol and use a new and sterile needle for each injection.

PRODUCT CODE #:	F70101C-NL
BATCH #:	02021701
DATE OF PRODUCTION:	03/01/2017
LIPID COMPOSITION:	Phosphatidylcholine and cholesterol
ACTIVE:	Clodronate, (Dichloromethylene) bisphosphonic acid disodium salt (CAS:22560-50-5)
CLODRONATE Concentration:	6.0 ± 0.5 mg/mL (liposome encapsulated post reconstitution)
BULK SOLUTION:	Lyophilized from PBS (10wt% sucrose, 20mM Na PO ₄), pH: neutral
VOLUME:	5.0 mL (post reconstitution)
FORM/COLOR:	White cake or powder. Milky and free flow liposomal dispersions post reconstitution. Liposomes may settle upon standing on bench which should disperse with proper mixing.
RECONSTITUTION:	Reconstitution of lyophilized Clophosome is straight forward. It is highly recommended to conduct the reconstitution in a certified BSC hood. To reconstitute add 4.5 ml sterile pure water into the vial at room temperature and hand shake for 1 min. For best shelf-life of reconstituted liposomes inject water through the rubber stopper (clean with alcohol first) using a sterile syringe. Let it stand on bench for 2-3 min and vortex briefly 2-3 times at medium speed. The liposomes can be used in 10 min after reconstitution. Be sure there are no visible lumps or any particles. Vortex more if necessary.
RECOMMENDED DOSE:	For macrophage depletion up to one week: 200 µL day 1 (for 20-25g animal body wt). For more consistent results inject 2 days in advance. For longer macrophage depletion: 150µL first dose, 100µL every 3-4 days. Note: shake the liposome solution briefly if the vial has been standing for more than 5 min.
Shelf-life:	Dry cake: 12 months stored at 2 – 8 °C from the date of delivery (guaranteed, exchange only). Reconstituted liposomes: 3 months stored at 2 – 8 °C (guaranteed, exchange only).

Product For Research Only, Not For Human or Companion Animal Use