

## PRODUCT DATA SHEET

**Manufacturer**  
Remembrane srl

**Catalogue No.**  
(...)

**Size**  
1 mL

**Concentration**  
500X

### General description

Refeed<sup>®</sup> is a fully defined combination of lipids, antioxidants and molecules involved in the lipid metabolism. Refeed<sup>®</sup> is a lipid supplement that modifies membrane lipidomics of cultured cells, developing different membrane network phenotypes and upgrading biological/marketable properties.

### Use and Applicability

Refeed<sup>®</sup> (...) formulations have been specifically developed to be used in in-vitro culturing of (...), in order to (...).

### Preparation

Before use, bring Refeed<sup>®</sup> to room temperature and vortex vigorously. Refeed<sup>®</sup> formulation is provided as a 1 ml ethanol solution at a concentration of 500X. For your convenience, fill a tube with 50 ml of complete medium and inject 100 µl of Refeed<sup>®</sup> vigorously all at once. Do NOT add Refeed<sup>®</sup> drop by drop on the surface of the medium.

IN ORDER TO BETTER PRESERVE REFEED<sup>®</sup> PROPERTIES, PREPARE FRESH SUPPLEMENTED MEDIUM EVERY TIME.

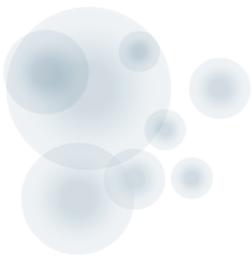
### Cell culture protocol

Each cell culture system is unique, therefore Refeed<sup>®</sup> supplements may need some fine-tuning tailored to each specific application of use.

Refeed<sup>®</sup> supplements are able to increase/decrease cell growth rate, depending on many factors such as cell type, protocol in use, specific Refeed<sup>®</sup> formulation. Apart from specific Refeed<sup>®</sup> formulations mimicking pathological or predisposing conditions, the majority of them will slightly increase cell growth rate.

Refeed<sup>®</sup> supplements can influence specific cell properties (i.e.: protein expression, protein functionality, immunomodulation, transfection, differentiation, trafficking processes, cell motility, etc.) and it is the user's duty to investigate changes of the parameters of interest and set appropriate baselines for internal experiments.

In order to supplement cells with Refeed<sup>®</sup>, it is NOT necessary to change the protocol in use. Instead of using the same medium, just use fresh supplemented medium (see Preparation paragraph above) and add it every time cells are splitted, typically every 2-3 days for immortalised cells and few days more for primary cells.



When specific protocols with multiple frequent media changes are involved (transfection, staining, etc.), DO NOT use supplemented medium for protocol intermediate passages, because such a high frequency of medium changes can cause lipid accumulation in cytoplasmic lipid droplets, affecting the physiology of the cell and the outcome of the experiment.

Cytoplasmic lipid droplets are a typical sign of lipid accumulation, meaning that the supplementation is too high. If this is the case, Refeed<sup>®</sup> quantity administered at split times should be reduced accordingly: cells will consume lipid excess in just a couple of passages.

During the entire testing process, our Technical Support team is at your disposal for any advice and suggestions.

### **Intended Use**

For research use only. CAUTION: Not intended for human or animal diagnostic or therapeutic uses.

### **Formulation**

Each Refeed<sup>®</sup> formulation is property of Remembrane. Every component has a purity of >98%. The solvent used is either ethanol 96% or phosphate buffered saline (PBS). Ethanol does not affect cell metabolism or growth when used in the culture medium at a final concentration <1%. For additional information, please contact our Technical Services Department.

### **Shelf Life & Storage**

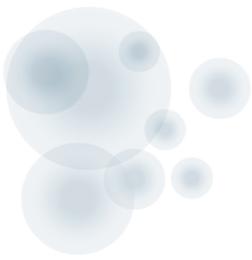
The expiration date shown on every Refeed<sup>®</sup> is an indication of how long the product will deliver effective performance. Our stability program establishes and verifies product expiration dates. Product groups are monitored at periodic intervals to determine the length of time during which the product will deliver acceptable performance under recommended storage conditions.

Refeed<sup>®</sup> supplements are manufactured under inert gas. For sustained optimal performance, store Refeed<sup>®</sup> at -20°C and minimize exposure to air and to all light sources under both storage and usage conditions.

Shelf-life is six months if unopened and kept at -20° C, protected from light. Remembrane does not guarantee Refeed<sup>®</sup> effectiveness if used after the expiration date. Please refer to product label for expiration date. Once opened, store at -20° C protected from light and use within three months.

### **Indications of Deterioration**

Refeed<sup>®</sup> should be clear and free of particulates and flocculent material if observed at room temperature. Do not use if it is cloudy or contains precipitate. Other evidence of deterioration may include color change, pH shift or degradation of physical or performance characteristics.



### Characteristics

Appearance: Clear to slightly yellow solution

pH: Refer to Material Safety Data Sheets

Sterility: No microbial growth detected

### Precautions

Use aseptic technique when handling Refeed<sup>®</sup>. THIS PRODUCT IS NOT INTENDED FOR HUMAN OR THERAPEUTIC USE. Refeed<sup>®</sup> contains unsaturated structures which may become oxidized if exposed to air. It is therefore closed under an inert gas atmosphere. Store at -20°C and do not open until use. Refeed<sup>®</sup> may contain ethanol 96% as solvent.

### Technical Support

For additional product and technical information, please refer to the Material Safety Data Sheet (MSDS). For further assistance, please email our Technical Support team at [customers@remembrane.com](mailto:customers@remembrane.com).

### Trademarks

Refeed<sup>®</sup> and Remembrane<sup>®</sup> are property trademarks of Remembrane srl.

### Warranty

Remembrane<sup>®</sup> warrants to the purchaser for a period of six months from date of delivery that this product conforms to its specifications. All other warranties, expressed or implied, including the implied warranty of merchantability and fitness for a particular purpose, are excluded. In no case will Remembrane be liable for any special, incidental, or consequential damages arising out of this product or the use of this product by the customer or any third party based upon breach of warranty, negligence, strict tort, or any other legal theory. THIS PRODUCT IS INTENDED FOR PURPOSES DESCRIBED ONLY AND IS NOT INTENDED FOR ANY HUMAN OR THERAPEUTIC USE.

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Indice di revisione	Data	Motivazione della revisione e parti revisionate	Redatto/Verificato	Approvato
1	23.01.17	Inserimento paragrafo "Cell culture protocol"	Alexandros Chatgialloglu Paola Poggi	Enrico Menzolini



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