

**Datasheet****PHA-L****Phytohemagglutinin L**

<b>Product</b>	<b>Description</b>	<b>Catalogue-No.</b>	<b>Size</b>
<b>PHA-L</b>	<b>Phytohemagglutinin-L, lyophilized</b>	<b>P05-01011M P05-01011</b>	<b>2 mg 10 mg</b>

**Product description**

Phytohemagglutinin is a lectin derived from plants (legumes). It is suitable for the stimulation of Lymphocytes (PHA-L) or the agglutination of Erythrocytes (PHA-E).

Lectins are an important mitogen group. Lectins bind specifically to membrane-glycoproteins of different cells, including lymphocytes. The agglutinating effect leads to lymphocyte activation and proliferation.

Phytohemagglutinins have several binding sites to carbohydrates located in the cell membrane of the targeted cells. PHA-L recognises complex oligosaccharides and binds to them leading to an agglutinating effect. Binding of the mitogen to the cell membrane seems to increase the molecular/information flow between the cell and its environment. Increased membrane permeability activates the synthesis of proteins and nucleic acids. The synthesis rate for messenger substances like lymphokines (e.g. IL-2) is also increased.

**Storage conditions**

Storage: -20°C

Stability: powder is stable until the printed expiry at -20 °C, reconstituted solution is stable at – 20 °C

**Composition**

Phytohemagglutinin-L from Phaseolus vulgaris (red kidney bean)

**Suitability**

Plant Lectin for stimulating Lymphocyte proliferation and differentiation

**Instructions for Use**

Reconstitute PHA-L with 2ml deionized water (concentration PHA-L solution: 5 mg/ml). Further dilute with deionized water, DPBS or cell culture media to final concentration. Filter sterilize the reconstituted solution with a 0.2 µm filter. It is recommended to make aliquots to avoid freeze and thaw cycles of the solution.

Note: You may sterilize the solution before diluting to final concentration. For further dilution use sterile liquids and aseptic techniques.

**Technical support**

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email ([info@pan-biotech.com](mailto:info@pan-biotech.com)) or phone +49-8543-601630.

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