

Instructions

1. Description

Product number J119
Product name UEA-I
Ulex europaeus lectin
Product form Freeze-dried powder (salt-free)
Storage Store at 2-8°C

2. Specification

Haemagglutinin activity < 50 μ g protein/mL
(Human O-type red blood cells (2%v/v))
Purity 1 major peak (Ion Exchange Chromatography)

3. Instructions and Precautions

Add buffer to the lectin and adjust the concentration to 1-2 mg/mL.

[LECTIN&GLYCOANALYSIS NEWS-Lectin solubility](#)

When dissolving the lectin, do not agitate vigorously, as strong agitation causes precipitation.

Once fully dissolved, divide the solution into single-use aliquots and store them at -20° C.

Be sure to avoid repeated freeze-thaw cycles to preserve reagent stability.

Notes

- Label Check: Always verify the details and instructions on the label before use.
- Packaging Caution: Use caution when opening the container/packaging to avoid cutting your hands.
- Personal Protective Equipment (PPE): Avoid direct contact with the reagent.
Always wear appropriate protective gear, including safety glasses, gloves, and a mask.
- First Aid Measures: If the reagent comes into contact with your eyes, mouth, or skin, flush immediately with plenty of water. If necessary, seek immediate medical attention.
- Disposal: Comply with all local laws and regulations, and dispose of the reagent properly.
- Intended Use: This reagent is for research use only (RUO) and must not be used for any other purposes, such as medical diagnostics or pharmaceutical applications.



Data Sheet

UAE-I <i>Ulex europaeus</i> lectin	
UAE-I	Product number : J119 Size : 2 mg Product form : Freeze-dried powder (salt-free) Storage : Stable at 4° C for 1 year.

- Source *Ulex europaeus*
- Sugar Specificity α -L-Fuc ^{1) 2)}
- Mitogen Activity No
- Blood Specificity O>>A₁ · A₂
- Structure Based on its amino acid sequence, the calculated molecular weight of UEA-I is approximately 26,700 Da. Its primary structure exhibits sequence homology with several other lectins, including Lotus lectin. ³⁾
- Characteristic UEA-I exhibits strong binding affinity for biantennary glycans carrying the blood group H (O) antigen motif (Fuc α 1-2Gal β 1-4GlcNAc...). ^{2) 4) 5)} Conversely, it displays only weak binding toward Lewis Y-type biantennary glycans and exhibits no binding activity toward monoantennary glycans.

Reference

- 1) Matsumoto, I., Osawa, T., *Biochim. Biophys. Acta*, **194**, 180 (1969)
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- 3) Konami, Y., Yamamoto, K., Osawa, T., *J. Biochem.*, **109**, 650 (1991)
- 4) Pereira, M. E. A., Kabat, E. A., et al., *Arch. Biochem. Biophys.*, **185**, 108 (1978)
- 5) Pereira, M. E. A., Kabat, E. A., *Arch. Biochem. Biophys.*, **194**, 511 (1979)

