

Product Information

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Fetuin from fetal bovine serum

BioReagent, suitable for cell culture

Catalog Number **F3385**

Storage Temperature 2-8 °C

Product Description

Molecular weight: 48.4 kDa¹

CAS Number: 9014-81-7

pI: 3.3¹; 3.2 - 3.8²

Extinction Coefficient: E^{1%} = 4.1, 4.5 (278 nm)^{1,3}

Synonym: Fetuin Type III.

This product is cell culture tested (0.8 g/L) and is appropriate for use in cell culture applications. Fetuin is a protein component of serum which contributes to the attachment and spreading of cells in culture medium. Researchers often add serum for this purpose. Fetuin has been used at a concentration of 500 µg/ml to supplement serum-free F12 medium (along with insulin, transferrin and 2-mercaptoethanol) in culture of embryonal carcinoma cells.⁴

Fetuin can be used as a glycoprotein standard for carbohydrate structure in a glycoprotein. The structural elucidation of the carbohydrate portion of fetuin has been published.⁵⁻⁹ The cDNA and amino acid sequences has been reported.⁵ Fetuin contains 12 Cys residues, all involved in disulfide bridges.¹⁰

The composition of bovine fetuin (weight %) is polypeptide 74%, hexose 8.3%, hexosamines 5.5%, and sialic acid 8.7%.¹ This product usually assays at 5-8% total sialic acid. Nearly all of this sialic acid is bound. The amount of free sialic acid is typically less than 0.3%. A method for determining free sialic acid content has been published.¹¹

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

This product is soluble in water (1 mg/ml).

Storage/Stability

Solutions of fetuin are stable for approximately 2 weeks when stored at 2-8 °C and for several months when aliquoted and stored at -20 °C. This assumption is based on the observation that cells are still active in serum, which has been stored under the above conditions.

References

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