FT-NJL372

D-(+)-Glucose Solution 10%, sterile

With 10% D-(+)-Glucose in sterile tissue culture grade water

Product Description

Catalog #:	NJL372, 500 ml
Name:	**D-(+)-Glucose Solution 10%, autoclaved**
	Dextrose
MW :	180.16
Molecular Formula:	$C_6H_{12}O_6$
CAS:	50-99-7
Storage:	15-30°C. (2 years)

For Research Use Only

Description

Glucose is a carbohydrate consisting of six carbon atoms and an aldehyde group. Glucose is used as a primary energy source in wide range of cell culture media including classical and serum-free media. It is one of the essential nutrients and is responsible for cell longevity and gene expression. High initial levels of glucose in the medium can contribute to an early boost in culture expansion but later results in formation of excess of lactic acid which lowers the pH of the medium causing stress and toxicity to the cells. High glucose concentration has shown to promote the proliferation of many tumor cell lines like HT29, MCF-7, MDA MB468. It also supports high cell growth in insect cell culture.

Application

·In bio-manufacturing:
Glucose is one of the major components of nutritional supplement solutions used in fed-batch bio- manufacturing of recombinant proteins, monoclonal antibodies, viral vectors for gene therapy and viral vaccines from mammalian and insect cell cultures. Addition of such glucose containing supplements in mid-run results in improvement in the quantity of the harvested product.

·In vitro diabetes research:
Glucose is the principle insulin secretogogue and a potent regulator of beta cell activity. It stimulates beta-cell proliferation and destruction. Addition of tritiated glucose to the culture medium and studying extent of glucose uptake in in vitro diabetes model is a very widely used system for evaluation of potency of anti-diabetic drug.

Quality Control

Appearance	Clear colorless to light yellow viscous solution.
pH	4.00 -6.00
Sterility	No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.
Cell Culture Test	Passes
Osmolality in mOsm/Kg H_2O	550.00 -650.00
Endotoxin Content	NMT 1EU/ml

Other Information

For in vitro R&D use only

Please contact InterBioTech – Interchim for any other information