

# Product Datasheet

## G418 Inhibitor NBP2-32805

Unit Size: 1 g

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP2-32805**

G418 Inhibitor

**Product Information**

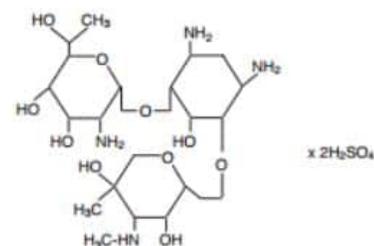
<b>Unit Size</b>	1 g
<b>Concentration</b>	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Buffer</b>	H2O

**Product Application Details**

<b>Application Notes</b>	Resistance to G418 is conferred by the neo gene from transposon Tn5 encoding an aminoglycoside 3'-phosphotransferase, APH 3' II 3. This protein inactivates G418 by covalently modifying its amino or hydroxyl functions therefore inhibiting the antibiotic-ribosome interaction.
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**Images**

G418 Inhibitor [NBP2-32805]

**CHEMICAL PROPERTIES****CAS n°:** 108321-42-2**Formula:** C<sub>20</sub>H<sub>40</sub>N<sub>4</sub>O<sub>10</sub> · 2H<sub>2</sub>SO<sub>4</sub>**Molecular weight:** 692.7**Structure:**

G418 Inhibitor [NBP2-32805]

**Mammalian cells**

The working concentration of G418 Sulfate for selection and maintenance of mammalian cell lines transfected with the *neo* gene varies with a multitude of factors including cell type. In a starting experiment we recommend to determine optimal concentrations of antibiotic required to kill your host cell line by treating the cells with several concentrations ranging from 100 µg/ml to 1 mg/ml. After treatment, cell death occurs rapidly allowing the selection of transfected cells with plasmids carrying the *neo* gene in as little as 7 days post-transfection. Suggested working conditions for selection in some mammalian cells are listed below:

Cell line	Specie	Tissue	Culture medium	G418 µg/ml
HeLa	Human	Uterus	DMEM	200-800
293	Human	Kidney	DMEM	400-1000
B16	Mouse	Melanoma	RPMI	400-1000
CHO	Hamster	Ovary	Ham's	200-400



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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Inhibitors are guaranteed for 1 year from date of receipt.

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