

Save 20% on Key Selection Antibiotics!



ABOUT TOKU-E COMPANY

TOKU-E Company is an ISO 9001:2008 certified company with over 25 years of experience and expertise in antimicrobial fermentation, manufacturing, and purification technologies. TOKU-E Company is a primary manufacturer of research antimicrobials for use in numerous *in vitro* applications including eukaryotic cell culture, microbiology, plant biology, virology, and cancer research. As a global supplier to scientists and notable life science companies, TOKU-E Company is committed to manufacturing antimicrobials of the highest quality and consistency to facilitate reproducible and meaningful research around the world.

GENE SELECTION ANTIBIOTICS

Transfection and transformation refer to the processes of introducing DNA or other nucleic acids into eukaryotic or prokaryotic cells, respectively. To ensure DNA has integrated into the cell's genome, a selective marker is co-transfected with the desired gene which usually confers resistance to a selection antibiotic. Selective stress is applied to transfected or transformed cells by using a selective agent or selection antibiotic. Only cells that contain the desired gene along with a resistance gene will grow and survive in the presence of a selective agent. Frequently used selection antibiotics include G418, hygromycin B, neomycin, and puromycin.

For protocols, applications, and a complete list of products, visit www.TOKU-E.com.

Click any link below for pricing and more information!

*Offer valid until 6/30/17



Blastidicin S HCl

Blastidicin S HCl is a nucleoside antibiotic, and is routinely used in cell culture gene selection applications to select for transfected cells containing the *bsd/bls* resistance genes. Optimal selection concentrations of blastidicin S HCl range from 1 µg/mL - 30 µg/mL but typically lie between 2 µg/mL and 10 µg/mL.

- [Blastidicin S HCl \(B001\)](#)
- [Blastidicin S HCl, 10 mg/ml solution \(B006, B007\)](#)



G418 disulfate

G418 disulfate is an aminoglycoside antibiotic, and is routinely used as a selection agent in cell culture to select for transfected cells containing the *neo (kanr, nptII)* resistance gene. G418 disulfate is typically used at a concentration between 200 mg/L – 1000 mg/L.

- [G418 disulfate \(G001\)](#)
- [G418 disulfate, 50 mg/ml solution \(G020, G021\)](#)



Hygromycin B

Hygromycin B is an aminoglycoside antibiotic and is commonly used to select for transfected cells containing the *hyg* or *hph* resistance genes. Optimal selection concentrations of hygromycin B can range from 50 µg/mL - 1000 µg/mL; however, most common selection concentration ranges are between 50 µg/mL - 200 µg/mL.

- [Hygromycin B \(H007\)](#)
- [Hygromycin B, 50 mg/ml solution \(H011\)](#)



Puromycin DiHCl

Puromycin DiHCl is an aminoglycoside antibiotic, and is commonly used to select for transfected cells containing the *pac* gene. Optimal selection concentrations of puromycin typically range from 0.5 µg/mL - 2 µg/mL for suspended cells and 2 µg/mL - 5 µg/mL for adherent cells.

- [Puromycin DiHCl \(P001\)](#)
- [Puromycin DiHCl, 10 mg/ml solution \(P025, P026\)](#)



Ampicillin

Ampicillin is a beta-lactam antibiotic that is often used to select for cells that have been transformed with a plasmid containing the *ampR* gene which confers resistance to ampicillin.

- [Ampicillin sodium \(A042\)](#)
- [Ampicillin trihydrate, USP \(A009\)](#)
- [Ampicillin trihydrate, EP \(A020\)](#)
- [Ampicillin anhydrous \(A043\)](#)



Carbenicillin

Carbenicillin disodium is a beta-lactam antibiotic that is often used to select for cells that have been transformed with a plasmid containing the *ampR* gene which confers resistance to ampicillin and carbenicillin.

- [Carbenicillin disodium, USP \(C126\)](#)
- [Carbenicillin disodium, UltraPure \(C107\)](#)



Kanamycin

Kanamycin sulfate is an aminoglycoside antibiotic, and is often used as a selective agent to isolate cells that have been successfully transformed with plasmids containing the kanamycin resistance gene, *nptII*.

- [Kanamycin sulfate, USP \(K008\)](#)
- [Kanamycin acid sulfate \(K004\)](#)



Tetracycline

Tetracycline is a polyketide antibiotic, and is commonly used to select for bacterial cells that have been transformed with a plasmid that contains the tetracycline resistance gene, *tet*.

- [Tetracycline, USP \(T051\)](#)
- [Tetracycline, EP \(T016\)](#)
- [Tetracycline HCl \(T004\)](#)