
Metronidazole/BSA

Catalog Number: bs-2059PB

AA Seq: Coupling protein

Tags: N/A

Activity: No

Endotoxin: Not analyzed

Form: Liquid

Storage: 0.01M TBS(pH7.4).

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: Metronidazole is a nitroimidazole antibiotic medication used particularly for anaerobic bacteria and protozoa. Metronidazole is an antibiotic, amebicide, and antiprotozoal. Metronidazole, taken up by diffusion, is selectively absorbed by anaerobic bacteria and sensitive protozoa. Once taken up by anaerobes, it is non-enzymatically reduced by reacting with reduced ferredoxin, which is generated by pyruvate oxidoreductase. Many of the reduced nitroso intermediates will form sulfinamides and thioether linkages with cysteine-bearing enzymes, thereby deactivating these critical enzymes. As many as 150 separate enzymes are affected. In addition or alternatively, the metronidazole metabolites are taken up into bacterial DNA, and form unstable molecules. This function only occurs when metronidazole is partially reduced, and because this reduction usually happens only in anaerobic cells, it has relatively little effect upon human cells or aerobic bacteria.