

FITC Labeled D-Alanine Suitable for bacterial labeling

Art. ID SAF-SBR00049-5MG
Unit 5 mg

Description

Bacterial Peptidoglycan is a polymer consisting of sugars and amino acids, a mesh-like rigid layer that forms the cell wall. D-Amino Acids (D-AAs) are metabolically incorporated onto the bacterial cell wall by D,D-transpeptidase and/or L,D-transpeptidase. It was recently discovered that those transpeptidases catalyze the metabolic incorporation of exogenous D-AAs with almost no restriction of the side-chain identity. Modification of a D-AA with molecular fluorophores provides fluorescent d-amino acids that can efficiently label in situ peptidoglycan in diverse bacterial species. Fluorescein Labeled D-Alanine is a fluorescent derivative of D-alanine that is obtained by a synthetic conjugation of 3-amino-D-alanine to a fluorophore. Fluorescein Labeled D-Alanine has high biocompatibility and suitability for labeling peptidoglycans in live bacteria