

**Synthesis and β -lactamase inhibitory activity of
6-exomethylene penamsulfone derivatives-I
(Synthesis of 1-substituted thioalkyl-1,2,3-triazole-4-carboxaldehyde)**

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β -Lactamase 억제제로 6-Substituted exomethylene기를 갖는 penam계 화합물이 강력한 활성을 보여주고 있어서, β -lactamase 억제제의 중간체 합성으로 6-exomethylene기에 도입할 1-substituted thioalkyl-1,2,3-triazole-4-carboxaldehyde를 합성하였다.

2-Bromoethanol에 NaN_3 를 반응시켜서 2-Azidoethanol을 합성하였고, 이것을 propargyl aldehyde와 반응시켜서 1-(2-hydroxyethyl)-1,2,3-triazole-4-carboxaldehyde를 합성하였다. 이것을 trifluoromethanesulfonic anhydride와 triethylamine존재 하에 heterocyclic mercapto화합물과 반응시켜서 heterocyclic ring을 함유한 1-substituted thioalkyl-1,2,3-triazole-4-carboxaldehyde를 합성하였다.