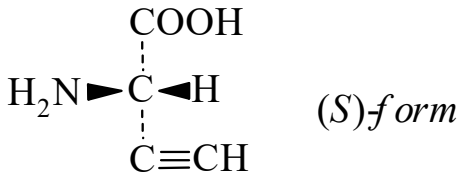
>>**Entry Name: 2-Amino-3-butynoic acid,** 9CI
**Synonym(s):** 2-Ethynylglycine. FR 900130. Antibiotic FR 900130



(*S*)-form

**CAS Registry Number:** 73410-55-6

**Molecular Formula:** $C_4H_5NO_2$
**Molecular Weight:** 99.089
**Accurate Mass:** 99.032029
**Percentage Composition:** C 48.49%; H 5.09%; N 14.14%; O 32.29%
**General Statement:** Amino acid antibiotic

>>**Variant:** (*R*)-form

**Molecular Formula:** $C_4H_5NO_2$
**Molecular Weight:** 99.089
**Accurate Mass:** 99.032029
**Percentage Composition:** C 48.49%; H 5.09%; N 14.14%; O 32.29%

>>**Derivative:** *N-tert*-Butyloxycarbonyl

**CAS Registry Number:** 162107-50-8
**Molecular Formula:** $C_9H_{13}NO_4$
**Molecular Weight:** 199.206
**Accurate Mass:** 199.084459
**Percentage Composition:** C 54.26%; H 6.58%; N 7.03%; O 32.13%
**Physical Description:** Oil
**Optical Rotation:** $[\alpha]_D^{20}$ –53.9 (c, 0.89 in $CHCl_3$) (>90% ee)

>>**Variant:** (*S*)-form

**CAS Registry Number:** 73537-09-4

**Molecular Formula:** $C_4H_5NO_2$
**Molecular Weight:** 99.089
**Accurate Mass:** 99.032029
**Percentage Composition:** C 48.49%; H 5.09%; N 14.14%; O 32.29%
**Biological Source:** Isol. from *Streptomyces catenulae*
**Use/Importance:** Synergistic with D-cycloserine
**Biological Use/Importance:** Active against gram-positive bacteria
**Physical Description:** Light-yellow unstable powder
**Solubility:** Sol. $H_2O$; fairly sol. MeOH; poorly sol. EtOH, hexane

>>**Derivative:** *N*-Ac, Na salt

**Optical Rotation:** $[\alpha]_D^{20}$ +37.5 (c, 0.5 in $H_2O$)

**References:**

*U.S. Pat.*, 1963, 3 079 345; *CA*, **58**, 9922, *(synth, use)*
Kuroda, Y. *et al.*, *J. Antibiot.*, 1980, **33**, 125; 132, *(isol, props)*
Williams, R.M. *et al.*, *J.C.S. Perkin 1*, 1990, 171, *(synth)*
Meffre, P. *et al.*, *Tetrahedron*, 1996, **52**, 11215-11238, *(R-form, N-tert-butyloxycarbonyl)*