# 6-[D-(2-amino-2-phenylacetyl)amino]-3,3-dimethyl acid

**Other names:** ampicillin

**Inchi:** InChI=1S/C16H19N3O4S/c1-16(2)11(15(22)23)19-13(21)10(14(19)24-16)18-12(20)9(17)

**InchiKey:** AVKUERGKIZMTKX-UHFFFAOYSA-N

**Formula:** C16H19N3O4S

**SMILES:** CC1(C)SC2C(NC(=O)C([NH3+])c3ccccc3)C(=O)N2C1C(=O)[O-]

**Mol. weight [g/mol]:** 349.41

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| log10ws | -2.14 | | Cheméo Relay (1.0) |
| logp | -1.733 | | Crippen Method |
| mcvol | 247.690 | ml/mol | McGowan Method |

## Sources

**Densities and Speeds of Sound of l-Serine with Aqueous Solutions of Antibacterial Drugs at Different Temperatures:** https://www.doi.org/10.1021/je3006425

**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws

**Cheméo Relay (1.0):**

**Cheméo Relay (1.0, beta):**

**Effect of different variables in the solubility of ampicillin and corresponding solid phase:** https://www.doi.org/10.1016/j.fluid.2017.11.033

**Interaction of antibacterial drug ampicillin with glycine and its dipeptides analyzed by volumetric and acoustic methods at different temperatures:** https://www.doi.org/10.1016/j.tca.2012.10.018

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

**Solvation behaviour of dipeptides of alanine in aqueous solutions of antibacterial drug ampicillin at different temperatures:** https://www.doi.org/10.1016/j.tca.2013.09.006

## Legend

**log10ws:** Log10 of Water solubility in mol/l

**logp:** Octanol/Water partition coefficient

**mcvol:** McGowan's characteristic volume