

Scoring : **Very Weak** **Weak** **Middle** **Strong** **Very Strong**

🔧 CARD Database

Gene Name: SHV-1
Best Hit ID ACR66323.1
Similarity: **100%**
Coverage: **89%**
Bitscore: **556.6**
value: **6e-160**

AMR profile:

SHV-1 is a broad-spectrum beta-lactamase found in *Klebsiella* spp., as well as *Acinetobacter* spp., *E. coli*, *Raoultella terrigena*, and *Yersinia pestis*.

antibiotic inactivation enzyme. Enzyme that catalyzes the inactivation of an antibiotic resulting in resistance. Inactivation includes chemical modification, destruction, etc...

🔧 antibiotic inactivation enzyme [Mechanism]

🔧 beta-lactam antibiotic [Class]
determinant of beta-lactam resistance. Enzymes, other proteins or other gene products shown clinically to confer resistance to beta-lactam antibiotics.

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🔧 megares Database

Gene Name: SHV
Best Hit ID g|1291621298|dbj|AB551737.1|be
Similarity: **99.66%**
Coverage: **88.82%**
Bitscore: **587**
value: **0**

AMR profile:

Antibiotic Class: betalactams

Gene Name: SHV

Antibiotic Mechanism: Class A betalactamases

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🔧 ARDB Database

Gene Name: b|2|be_shv2
Best Hit ID P30896
Similarity: **99.3%**
Coverage: **89%**
Bitscore: **551.6**
value: **27e-158**

AMR profile:

Class A beta-lactamase. This enzyme breaks the beta-lactam antibiotic ring open and deactivates the molecule's antibacterial properties.

e_cephalosproiin

monobactam

n_cephalosproiin

penicillin

A group of antibiotics that contain 6-aminopenicillanic acid with a side chain attached to the 6-amino group. The penicillin nucleus is the chief structural requirement for biological activity. The side-chain structure determines many of the antibacterial and pharmacological characteristics. (Goodman and Gilman's The Pharmacological Basis of Therapeutics, 8th ed, p1065)