

Open Peer Review on Qeios

## R-(-)-Gossypol Acetic Acid

National Cancer Institute

## Source

National Cancer Institute. R-(-)-Gossypol Acetic Acid. NCI Thesaurus. Code C78348.

The orally bioavailable solvate of the R-(-) enantiomer of gossypol and acetic acid with potential antineoplastic activity. As a BH3 mimetic, R-(-)-gossypol binds to the hydrophobic surface binding groove BH3 of the anti-apoptotic proteins Bcl-2 and Bcl-xL, blocking their heterodimerization with pro-apoptotic members of the Bcl-2 family of proteins such as Bad, Bid, and Bim; this may result in the inhibition of tumor cell proliferation and the induction of tumor cell apoptosis. Racemic gossypol is a polyphenolic compound isolated from cottonseed.