

[Open Peer Review on Qeios](#)

MEK Inhibitor WX-554

National Cancer Institute

Source

National Cancer Institute. *MEK Inhibitor WX-554*. NCI Thesaurus. Code C101532.

An orally available small molecule mitogen-activated protein kinase kinase (MAP2K, MAPK/ERK kinase, or MEK) inhibitor, with potential antineoplastic activity. MEK inhibitor WX-554 selectively binds to and inhibits the activity of MEK, thereby preventing the activation of MEK-dependent effector proteins including some transcription factors, which may result in the inhibition of growth factor-mediated cell signaling and tumor cell proliferation. MEK, a dual-specificity threonine/tyrosine kinase that plays a key role in the activation of the RAS/RAF/MEK/ERK signaling pathway, is frequently upregulated in a variety of tumor cell types.