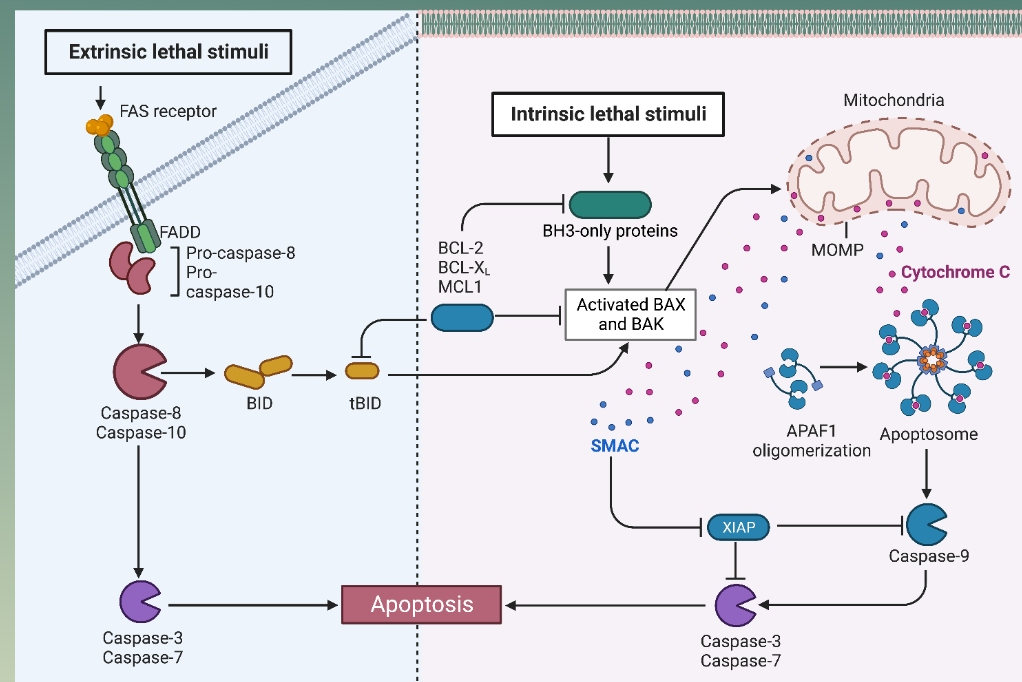


Apoptosis Related Ligands

Apoptosis is one of the programmed cell death (PDC) mechanisms in multicellular organisms. Biochemical cascade leads to morphological cell changes (cell shrinking, nuclear fragmentation, etc.) and death. This process is critical for maintaining the health of the organism by eliminating old or unhealthy cells. Apoptosis is controlled by Fas receptor and caspases (pro-apoptotic signaling) and Bcl-2/IAP (anti-apoptotic factors). The disbalance in the mechanism of apoptosis leads to atrophy in case of overstimulation, or cancer and related diseases in case of its suppression (the cells become "immortal"). It makes both processes of apoptosis (inhibition and stimulation) an important target for modern pharmacy and drug development.

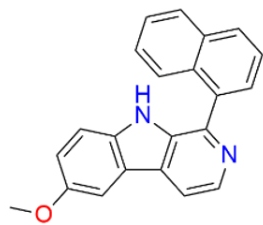
Apoptosis Related Ligands Library contains 352 small ligands, some representative molecules are given below: SP141, MDM2 inhibitor; ML-311, Mcl-1 inhibitor; Sepantronium bromide, a baculoviral IAP repeat containing 5 inhibitor.

Related terms: *MDM2 proto-oncogene, caspase, calpain 2, Bcl-2-like 1*

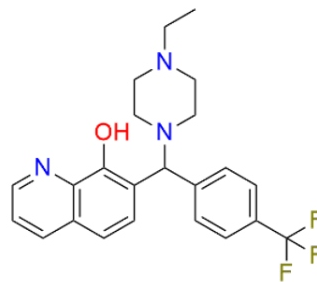


Apoptosis signaling pathways (Created by BioRender.com)

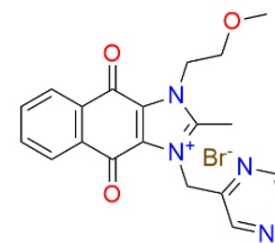
Highlights



EBC-07836
CAS: 1253491-42-7
SPI41, Mdm2 inhibitor



EBC-07310
CAS: 315698-17-0
ML-311, Mcl-1 inhibitor



EBC-11385
CAS: 781661-94-7
Sepantronium bromide,
baculoviral IAP repeat
containing 5 inhibitor

Library Composition

Name	Occurrence in the library, times
MDM2 proto-oncogene	12
Caspase 3	6
calpain 2	6
Caspase 8	2
Caspase 1	1
Caspase 4	1
Caspase 6	1
Caspase 7	1
Caspase 9	1
Bcl-2-like 1	1