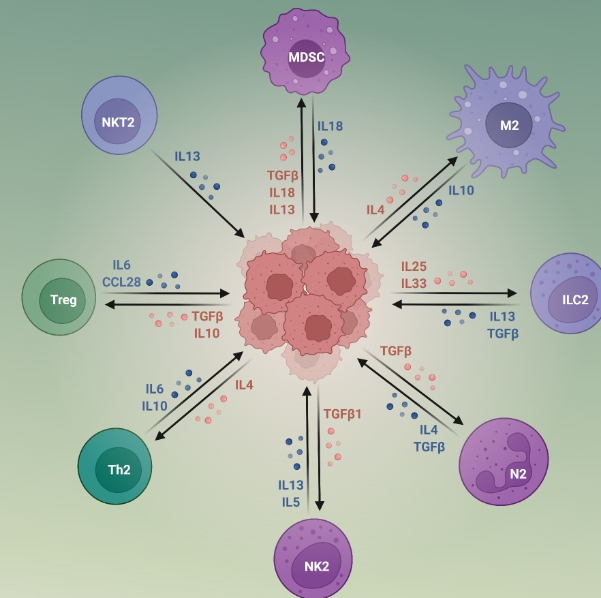


Cancer Immunology Related Ligands

Immuno-oncology is a trend in immunotherapy, which is directed at the stimulation of the immune system response against cancer cells. Normally the human immune system destroys cancer cells in the body, but cancer cells adapt and mutate in some cases, successfully camouflaging from the immune system. This fact allows tumors to grow and threaten the organism. Classical cancer immunotherapy agents are modified T-cells that target tumors, or antibody-based species that target the immune checkpoint cascades. However, small molecules acting on intracellular molecular targets, that affect immune response against cancer cells, are also an important tool for cancer immunology.

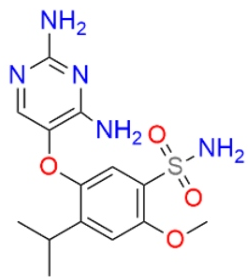
Cancer Immunology Related Ligands Library contains 948 small ligands, some representative molecules are given below: Gefapixant, P2X3 receptor antagonist; ABX-1431, MAG lipase inhibitor; TGX115, PI3 kinase inhibitor; Ticagrelor, P2Y12 platelet inhibitor.

Related terms: *A1 receptor, epoxide hydrolase, A2A, A3 receptor, fatty acid amide hydrolase, acetylcholinesterase, butyrylcholinesterase, carboxylesterase, Janus kinase*



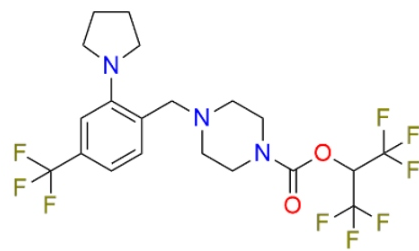
Immunosuppressive cells and related molecular targets in tumor microenvironment (Created by BioRender.com)

Highlights



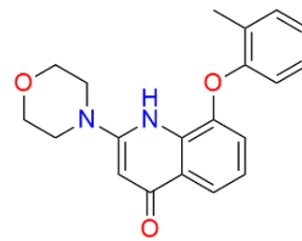
EBC-08759
CAS: 1015787-98-0

Gefapixant, P2X₃ receptor
antagonist



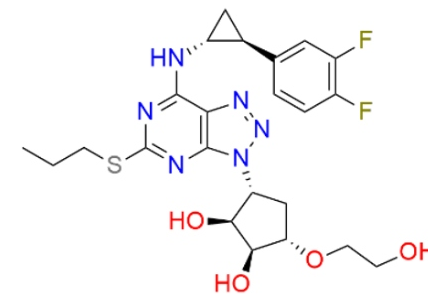
EBC-07964
CAS: 1446817-84-0

ABX-1431, MAG lipase inhibitor



EBC-12379
CAS: 351071-62-0

TGX115, PI3 kinase inhibitor



EBC-12279
CAS: 274693-27-5

Ticagrelor, P2Y₁₂ platelet
inhibitor

Library Composition

Name	Occurrence in the library, times
AI receptor	61
epoxide hydrolase 2	57
A2A receptor	54
A3 receptor	46
Fatty acid amide hydrolase	40
acetylcholinesterase (Cartwright blood group)	39
butyrylcholinesterase	33
carboxylesterase 1	28
Janus kinase 2	17
interleukin 1 receptor associated kinase 4	15
Janus kinase 1	15

P2X7	—	15
Monoacylglycerol lipase	—	14
tyrosine kinase 2	—	12
signal transducer and activator of transcription 3	—	12
Janus kinase 3	—	11
indoleamine 2,3-dioxygenase 1	—	10
CXCR1	•	7
Arginase I	•	6
CXCR4	•	6
phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma	•	6
A2B receptor	•	5
DP2 receptor	•	5
phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta	•	5

pancreatic lipase	•	4
EP2 receptor	•	4
phosphoinositide-3-kinase regulatory subunit 1	•	4
TP receptor	•	4
P2Y12 receptor	•	3
activin A receptor type 1B	•	3
CCR5	•	3
CCR2	•	3
EP4 receptor	•	3
Interleukin-2 receptor	•	3
Interleukin 21 receptor	•	3
phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta	•	3
Leukotriene A4 hydrolase	•	3

TLR2	•	3
transforming growth factor beta receptor 2	•	3
CCR1	•	2
CXCR2	•	2
Diacylglycerol lipase α	•	2
PLA2-G7	•	2
DPI receptor	•	2
Interleukin-3 receptor	•	2
tryptophan 2,3-dioxygenase	•	2
phosphatidylinositol 3-kinase catalytic subunit type 3	•	2
Interleukin-4 receptor subunit α	•	2
Interleukin-13 receptor subunit $\alpha 1$	•	2
Interleukin 23 receptor	•	2

Eythropoietin receptor	•	2
Granulocyte colony-stimulating factor receptor	•	2
Interferon- γ receptor	•	2
Interleukin-10 receptor	•	2
Interleukin-12 receptor	•	2
Interleukin-7 receptor	•	2
Interleukin-15 receptor	•	2
Interleukin-6 receptor	•	2
Interleukin-27 receptor	•	2
Thrombopoietin receptor	•	2
P2X1	•	2
P2X4	•	2
TLR4	•	2

TLR1	•	2
TLR7	•	2
phosphatidylinositol 4-kinase alpha	•	1
CCR3	•	1
CCR4	•	1
CCR7	•	1
CXCR3	•	1
ACKR3	•	1
Diacylglycerol lipase β	•	1
lipase G, endothelial type	•	1
IP receptor	•	1
Interferon γ receptor 1	•	1
phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha	•	1

phosphatidylinositol-4-phosphate 3-kinase catalytic subunit
type 2 beta

• 1

phosphoinositide-3-kinase regulatory subunit 2

• 1

Granulocyte macrophage colony-stimulating factor receptor

• 1

signal transducer and activator of transcription 6

• 1

P2X2

• 1

P2X3

• 1

phosphatidylinositol 4-kinase beta

• 1