

# Naturally-Derived Antibiotics, Anti-Inflammatories, & Antioxidants

Taking cues from nature's best compounds to study cell signaling, virology, and cancer biology

## Anti-Inflammatory Agents

Item No.	Product Name	Original Source	Activity
11679	Andrographolide	<i>A. paniculata</i> , a well-recognized medicinal plant in Asia	Exerts immunosuppressant, antithrombotic, anti-inflammatory, antineoplastic, antiviral, antibacterial, antidiabetic, antioxidative stress, antipyretic, antioedematogenic, and antinociceptive activities
11976	Apocynin	<i>P. kurroa</i> , a traditional medicinal plant	Inhibits NADPH oxidase activity; used in the treatment of arthritis, bowel disease, asthma, atherosclerosis, and familial amyotrophic lateral sclerosis
11818	Asiatic Acid	<i>C. asiatica</i> , a plant used in traditional medicines	Acts as an anti-inflammatory; stimulates wound healing by increasing collagen production; induces cell cycle arrest and apoptosis in breast cancer cells
11845	18 $\beta$ -Glycyrrhetic Acid	Major metabolite of glycyrrhizin, one of the main constituents of licorice	Exhibits anti-ulcerative, anti-inflammatory, and immunomodulatory properties
14015	Kahweol	Diterpene isolated from coffee beans	Increases glutathione S-transferase activity; has anti-inflammatory and anti-angiogenic effects
11973	Triptolide	Chinese thunder god vine ( <i>T. wilfordii</i> )	Exhibits antiproliferative, immunosuppressive, anti-inflammatory, antifertility, and anti-polycystic kidney disease effects
14248	Wogonin	Roots of <i>S. baicalensis</i> , a traditional Chinese herb	Exhibits anti-inflammatory, antioxidant, and neuroprotective activities

## Cardiovascular & Metabolic Disease-Related Compounds

Item No.	Product Name	Original Source	Activity
10006427	Berberine	Alkaloid found in <i>Berberis</i> , <i>H. canadensis</i> , <i>X. simplicissima</i> , <i>P. amurense</i> , <i>C. chinensis</i> , <i>T. cordifolia</i> , <i>A. mexicana</i> , and <i>E. californica</i>	Reduces total cholesterol, LDL cholesterol, and triglycerides
11041	Betulin	Triterpene found in the bark of birch trees	Inhibits the SREBP-driven pathway of cholesterol and fatty acid biosynthesis
18229	Digitoxigenin	Foxglove plant ( <i>D. purpurea</i> )	Inhibits the Na <sup>+</sup> /K <sup>+</sup> ATPase, producing cardiac contraction and cardiotoxic effects
11576	Phlorizin	Bark of apple trees	Reduces plasma glucose levels by blocking renal and intestinal glucose absorption
89460	Sclerotiorin	<i>Penicillium</i> sp.	Inhibits soybean lipoxygenase-1 and cholesterol ester transfer protein
64950	Xestospongins C	Pacific basin sponges	Exhibits vasodilatory properties

View a complete list of our **natural products** at [www.caymanchem.com](http://www.caymanchem.com)

## Anti-Cancer Compounds

Item No.	Product Name	Original Source	Activity
13877	Bleomycin (sulfate)	Antibiotic produced by <i>S. verticillus</i>	Induces single- and double-strand DNA breaks in tumor cells
11694	Camptothecin	Alkaloid extract from the Chinese tree <i>C. acuminata</i>	Inhibits DNA enzyme topoisomerase I
14190	Gilvocarcin V	Culture broth of <i>S. gilvotanareus</i>	Inhibits DNA synthesis by promoting the selective cross-linking when photoactivated by near-UV or visible light
10008886	(+)-Goniothalesdiol	Bark of the Malaysian tree <i>G. borneensis</i>	Exhibits significant cytotoxic effects against P388 mouse leukemia cells
10009645	Maslinic Acid	Pomace olive oil (orujo)	Has an antiproliferative effect on cancer cells
16860	Swainsonine	Phytotoxin in locoweed	Inhibits N-linked glycosylation; antiproliferative and antimetastatic effects on cancer cells
11764	Vincristine (sulfate)	Vinca alkaloid from <i>V. rosea</i>	Irreversibly blocks mitosis by binding to tubulin

## Antioxidants

Item No.	Product Name	Original Source	Activity
70950	Celastrol	Chinese thunder god vine ( <i>T. wilfordii</i> )	Exhibits 15 times the antioxidant potency of $\alpha$ -tocopherol
81025	Curcumin	Principal curcuminoid of turmeric	Exhibits antioxidant, anti-tumor, and anti-inflammatory properties
14016	Iberin	Isothiocyanate found in cruciferous plants	Induces the expression of phase II detoxification enzymes, including quinone reductase and glutathione S-transferase
10005169	Quercetin	Flavonoid found in fruits, vegetables, leaves, and grains	Scavenges free radicals to reduce oxidation
10004235	cis-Resveratrol	Stilbenoid found in grapes, red wine, and various berries	Blocks production of ROS by inhibiting NAD(P)H oxidase; also inhibits production of nitric oxide

## Infectious Disease Research

Item No.	Product Name	Original Source	Activity
11815	Artemether	From plants of the genus <i>Artemisia</i>	Kills malarial parasites <i>P. falciparum</i> and <i>P. vivax</i>
11700	Conessine	Steroid alkaloid found in the <i>Apocynaceae</i> family	Used in traditional herbal medicine as a treatment for amoebic dysentery
13089	Radicalol	<i>D. chlamydosporia</i>	Inhibits Hsp90 and DNA topoisomerase type II proteins to produce antibiotic, antifungal, and antimalarial effects

View a complete list of our **natural products** at [www.caymanchem.com](http://www.caymanchem.com)