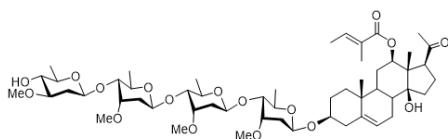


Natural Product Library

I Background

Natural products have been acknowledged for numerous years as a vital source of new drug development, new active ingredients and new ideas. From the 1940s to the present, nearly 75% of newly discovered small molecule anticancer drugs have been associated with natural products, and 21 natural product derivatives were marketed between 1998 and 2004, with an additional 19 derivatives approved in the following 5 years. Many natural products and their derivatives are powerful tools for studying and modulating protein functions.

As a gift from nature to mankind, natural products, even if unable to become drugs directly, can often inspire and guide researchers, seeking various ways to contribute to scientific research.



II Top Selected Natural Product Libraries

1) Featured Natural Product Library

At present, there are two major challenges in natural products research:

- (1) The isolation and purification of natural product monomers as research samples;
- (2) Once monomers of interest are found, the optimization of the monomer structure for future derivatives with better medicinal properties.

Based on these challenges, TargetMol® has launched a variety of Natural Product Libraries.

Natural Product Libraries (HTS)

Products	ID
Natural Product Library for HTS	L6000

Natural Product Libraries (Derivatives)

Products	ID
Natural Product Derivatives Library	NY1000

Natural Product Libraries (Monomers)

Products	ID
Selectable Natural Product Library	L6020

Characteristic Natural Product Libraries

Products	ID	Products	ID	Products	ID
Anti-Gastroenteritis Natural Product Library	L6600	Alkaloid Natural Product Library	L6110	Traditional Chinese Medicine Monomer Library	L6810
Anti-Tumor Natural Product Library	L6700	Flavonoid Natural Product Library	L6120	Tibetan Medicine Compound Library	L6210
Anti-COVID-19 Traditional Chinese Medicine Compound Library	L6720	Terpene Natural Product Library	L6130	Anti-Inflammatory Traditional Chinese Medicine Compound Library	L6710
Microbial Natural Product Library	L6500	Food as Medicine Compound Library	L6300	Saccharide and Glycoside Natural Product Library	L6140
Selected Plant-Sourced Compound Library	L4600	Chinese Pharmacopoeia Natural Product Library	L6800	Polyphenolic Natural Product Library	L6100



2.1) Popular Natural Products (categorized by structures)

The chemical structures of natural products are the basis of their bioactivities. Different sources of natural products result in a variety of different chemical structures. Therefore, a diversified species collection ensured the structural diversity of extracted monomers. We have summarized some classic natural product structures from the monomers of 18,000 natural products, such as Ketones, Alkaloids, Quinones, Lignans, and Coumarins in plants; Polysaccharides, Enzymes, Antibiotics, Amino Acids, etc. in microorganisms.

Alkaloids		Phenols		Ketones	
Products	ID	Products	ID	Products	ID
Quinine	T0690	Resveratrol	T1558	Quercetin Dihydrate	T6630
(S)-(+)-Camptothecin	T1123	Tannic Acid	T0801	Silibinin	T1660
Berberine	T450797	Cianidanol	T0822	Rutin	T0795

Terpenoids		Quinones		Phenylpropanoids	
Products	ID	Products	ID	Products	ID
Ursolic Acid	T0722	Aloe-emodin	T2843	Psoralen	T2942
Oleanolic Acid	T2865	Alkannin	T4958	Magnolol	T3000
Andrographolide	T2898	Embelin	T6485	Fraxetin	T2909

Coumarins		Steroids		Lignans	
Products	ID	Products	ID	Products	ID
8-Methoxypsoralen	T1548	Chenodeoxycholic Acid	T0847	Etoposide	T0132
Coumarin	T0775	Asiatic Acid	T2827	Picropodophyllin	T6943
Praeruptorin E	T451422	Cholic Acid	T2963	Gomisin A	T6S1917

2.2) Popular Natural Products (categorized by plant sources)

Historically, natural products (NPs) have played a key role in drug discovery, especially for cancer and infectious diseases.^{1 2} A broad and diverse herbal source is an important guarantee for a high-quality Natural Product Library. TargetMol® has collected massive relevant information of nearly 10,000 natural product monomers and numerous plants in 196 families, 887 genera. We can be a great help for you to search your desired compounds according to plant classifications:

Caprifoliaceae		Solanaceae		Rutaceae	
Products	ID	Products	ID	Products	ID
Apigenin	T2175	Anisodamine	T0970	(+)-Pilocarpine Hydrochloride	T0804
1,5-Dicaffeoylquinic Acid	T6S1529	Scopolin	T3888	Naringenin	T2838
Neochlorogenic Acid	T6S1538	Scopolamine	T3S0478	Hesperidin	T1035

Liliaceae		Umbelliferae		Oleaceae	
Products	ID	Products	ID	Products	ID
Angelic Acid	T3328	Ferulic Acid	T2215	Luteolin	T1027
Ligustilide	T5S1287	Decursin	T3S1416	Fraxin	T3783
Decursinol	T8169	Notopterol	T6S1435	Forsythoside A	T3670

III Inquiry and Order

We are able to customize exclusive Natural Product Libraries according to the needs of customers. In addition, we also provide corresponding drug activity screening services to help customers without sufficient experimental conditions. Please feel free to consult our technical supports by sending emails to info@targetmol.com

¹ Atanasov, A. G. et al. Discovery and resupply of pharmacologically active plant-derived natural products: a review. *Biotechnol. Adv.* 33, 1582–1614 (2015).

² Harvey, A. L., Edrada-Ebel, R. & Quinn, R. J. The re-emergence of natural products for drug discovery in the genomics era. *Nat. Rev. Drug Discov.* 14, 111–129 (2015).