



Fullscript-tested

Assessing berberine potency

At Fullscript, we're committed to independently testing products that we distribute to provide quality assurance and validate important safety and efficacy label claims.

As part of our commitment to quality and efficacy, we selected berberine products distributed by Fullscript to test for potency claims. Based on US and Canadian industry guidelines, Fullscript's Medical Advisory Team defined a berberine or berberine HCl content of **95–115%** of label claims as the qualifying benchmark for quality confirmation.

Learn more about [Fullscript's commitment to quality](#).

Berberine is one of many isoquinoline alkaloids in several plants, including *Berberis vulgaris* and *Hydrastis canadensis* (goldenseal). Relying on evidence-based practices, some healthcare providers have used supplements containing berberine to support patients receiving whole-person treatments for gastrointestinal health, blood sugar support, and other health concerns. However, education and awareness are currently needed to highlight recent quality concerns related to contamination, potency, and adulteration of berberine supplements.

Potency: The quantity of berberine in products can vary greatly. This variability can be due to differences in where and how the plants are grown, when they're harvested, and the methods used to extract berberine. If a berberine product is less potent than needed, it might not be effective. Conversely, excessively potent products carry a higher potential for side effects or harm.

Some berberine products might not contain the labeled amount per serving. In a 2023 report on 33 Amazon and Walmart berberine products purchased online, supplement brand NOW found that 18 contained less than 40% of claimed potency. Seven products had 1% or less of label claim.

54.5%

of berberine products obtained online from Amazon and Walmart had less than 40% of label claims.

Adulteration: Because of the high cost and limited supply of raw materials, manufacturers sometimes substitute berberine with cheaper, ineffective ingredients. This not only misleads providers and patients but can also introduce health risks if the substitutes are harmful.

To avoid these risks, consumers should purchase berberine from reputable sources that provide independent third-party testing results confirming the product's purity and potency. It's also important that products comply with current Good Manufacturing Practices (cGMP) to ensure their quality.

High-performance liquid chromatography (HPLC) is considered the gold standard for determining potency of finished berberine products. The United States Pharmacopeia (USP) monograph for berberine includes sample preparation for proper extraction and preparation methods to isolate berberine. The USP monograph also contains specific details on aspects of the HPLC column, mobile phase, and flow rate.

Some overage of primary ingredients is necessary for product shelf life. The US Food and Drug Administration (FDA) mandates that dietary supplements meet label claims until expiration. Manufacturers therefore add extra ingredients to ensure compliance. Delivery formats with less integrity, such as gummies and liquids, lose potency faster and require additional overage amounts.

105.3%

Average percentage of berberine content compared to label claims for Fullscript-tested products

Featured Fullscript-tested products

The Fullscript catalog experience will soon allow you to filter quality-tested products. The following are featured high-quality products that meet Fullscript's purity standards

Brand	SKU	Product	Results
Vital Nutrients	VN0022	Berberine 200 mg	105.6%
Vital Nutrients	VN0222	Berberine 500 mg	104.6%
Pure Encapsulations	PU1100	Berberine UltraSorb	104.3%
Allergy Research Group	AL0475	Berberine 500	100.3%
Integrative Therapeutics	IT0107	Berberine 500 mg	98.8%

Other passing results

The following are the remaining products that met the purity standards.

Brand	SKU	Product	Results
Restorative Formulations	RF0038	Berberine GS Px	114.2%
MediHerb	MJ0075	Berberine Active (60 tablets)	106.5%
Biotics Research	BC0142	Berberine HCl	105.3%
DaVinci Labs	DN0308	Berberine Force	104.4%
NuMedica	UM0017	Berberine VasoQX	104.1%
Bioclinic Naturals	BS0081	Bioclinic Naturals Berberine HCL	103.5%
Patient One MediNutritionals	PO0091	Berberine 500 mg	102.0%
Natural Factors	NZ0046	WellBetX Berberine 500 mg	101.4%
Euromedica	EU0040	Berberine - Metabolic Support	100.4%
Solaray	LR0063	Berberine 500mg (60 capsules)	98.6%
Enzymedica	EY0029	Berberine (60 capsules)	95.7%
Gaia Herbs Pro	GA1011	Berberine Metabolic	95.0%

