



LKT Laboratories, Inc.

Azelaic Acid

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID A9817

CAS No. 123-99-9

Chemical Name Nonanedioic acid

Synonym 1,7-heptanedicarboxylic acid, Anchoic acid, Azelex

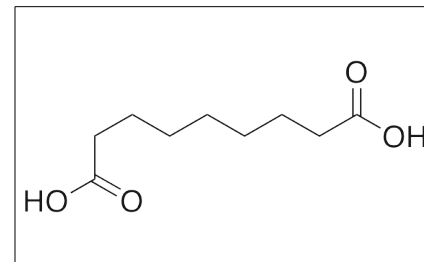
Formula C₉H₁₆O₄

Formula Wt. 188.22

Melting Point 106.5 °C

Purity ≥98%

Solubility Soluble in boiling water and alcohol



Bulk quantities available upon request

Product ID	Size
A9817	5 g
A9817	25 g

Store Temp Ambient

Ship Temp Ambient

Description Azelaic acid is a dicarboxylic acid originally found in *Arabidopsis* that exhibits anti-inflammatory activity. Azelaic acid is clinically used to treat rosacea, acne, and hyperpigmentary disorders. Azelaic acid directly inhibits kallikrein 5 (KLK5), downregulating expression of KLK5, toll-like receptor 2 (TLR 2), and cathelicidin, and suppresses activity of serine proteases in vitro, in vivo, and in clinical settings. In PUFA-treated fibroblasts, azelaic acid decreases generation of ROS and upregulates expression of antioxidative enzymes, inhibiting cell damage; agonist activity at PPAR γ is thought to drive these effects. Azelaic acid also inhibits proliferation of melanocytes. This compound displays anticancer potential as well, inhibiting the proliferation of cutaneous melanoma cells due to suppression of mitochondrial oxidoreductive activity and DNA synthesis.

References Coda AB, Hata T, Miller J, et al. Cathelicidin, kallikrein 5, and serine protease activity is inhibited during treatment of rosacea with azelaic acid 15% gel. *J Am Acad Dermatol.* 2013 Oct;69(4):570-7. PMID: 23871720.

Briganti S, Flori E, Mastrofrancesco A, et al. Azelaic acid reduced senescence-like phenotype in photo-irradiated human dermal fibroblasts: possible implication of PPAR γ . *Exp Dermatol.* 2013 Jan;22(1):41-7. PMID: 23278893.

Fitton A, Goa KL. Azelaic acid. A review of its pharmacological properties and therapeutic efficacy in acne and hyperpigmentary skin disorders. *Drugs.* 1991 May;41(5):780-98. PMID: 1712709.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.