

L-Dihydroxyphenylalanine (L-DOPA), G-BSA-conjugated

DAG3363 chemosynthetic

Lot. No. (See product label)

PRODUCT INFORMATION

Product overview	L-Dihydroxyphenylalanine (L-DOPA), G-BSA-conjugated
Description	L-Dihydroxyphenylalanine (L-DOPA), Conjugated
Species	chemosynthetic
Specificity	L-Dihydroxyphenylalanine (L-DOPA) conjugated with glutaraldehyde (G) and bovine serum albumin (BSA).
Conjugate	G-BSA
Form	Lyophilized (1 mg); Lyophilized and reconstituted in deionized water (250 µg)
Applications	immunohistochemistry and immunocytochemistry
Usage	This antigen was used to produce a polyclonal antibody and a monoclonal antibody.
Quality Control Test	250 micrograms, 1 milligram

PACKAGING

Storage	Store at -20°C for one year. Reconstitute with deionized H ₂ O + 0.1% merthiolate (optional preservative). This solution is stable at +4°C for 15 days.
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BACKGROUND

Introduction	L Dopa is an intermediate in dopamine biosynthesis. Clinically, L Dopa is used in the management of Parkinson's disease. It is used as a prodrug to increase dopamine levels since it is able to cross the blood-brain barrier whereas dopamine itself cannot. Once L Dopa has entered the central nervous system (CNS), it is metabolised to dopamine by aromatic L amino acid decarboxylase. This also occurs in the peripheral tissues, causing adverse effects and decreasing the available dopamine to the CNS, so it is standard practice to co administer a peripheral DOPA decarboxylase inhibitor and often a catechol-O-methyl transferase (COMT) inhibitor.
Keywords	L-DOPA; L-3,4-dihydroxyphenylalanine; levodopa; Sinemet; Parcopa; Atamet; Stalevo; Madopar; Prolopa; Deadopa

REFERENCES

1. Hyland K, Clayton PT (December 1992). "Aromatic L-amino acid decarboxylase deficiency: diagnostic methodology" (PDF). *Clinical chemistry* 38 (12): 2405–10.
2. Merims D, Giladi N (2008). "Dopamine dysregulation syndrome, addiction and behavioral changes in Parkinson's disease". *Parkinsonism Relat Disord* 14 (4): 273–280.