## Anti-L-DOPA monoclonal antibody <br> (DMAB4563)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| Specificity | Using a conjugate L-DOPA-(Pc), antibody specificity was performed with an ELISA test by competition experiments with the following compounds : <br> Compound Cross-reactivity ratio (a) $\text { L-DOPA-G-(Pc) } 1$ <br> Dopamine-G-(Pc) 1/>50,000 <br> Noradre |
| :---: | :---: |
| Immunogen | Synthetic L-DOPA conjugated to protein carrier (Pc) |
| Isotype | lgG1 |
| Source/Host | Mouse |
| Species Reactivity | N/A |
| Conjugate | Unconjugated |
| Applications | Immunocytochemistry |
| Size | $100 \mu \mathrm{l}$ |
| Preservative | None |
| Storage | Store at $-20^{\circ} \mathrm{C}$. Avoid multiple freeze/thaw cycles. |

## BACKGROUND

Introduction
L Dopa is anintermediate in dopamine biosynthesis. Clinically, L Dopa is used in themanagement of Parkinson"s disease. It is used as a prodrug to increasedopamine levels
since it is able to cross the blood-brain barrier whereasdopamine 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 anddecreasing the available dopamine to the CNS, so it is standard practice toco administer a peripheral DOPA decarboxylase inhibitor and often acatechol-O-methyl transferase (COMT) inhibitor.

Keywords<br>34 dihydroxy L phenylalanine; L dihydroxyphenylalanine; Levodopa; BETA-(3,4-DIHYDROXYPHENYL)-L-ALANINE; HYDROXYTYROSINE; H-PHE(3,4-DI-HYDROXY)-OH; H-PHE(3,4-DI-OH)-OH; H-TYR(3-HYDROXY)-OH; L-BETA-(3,4-DIHYDROXYPHENYL)ALANINE; L-DOPA; L-DOPA, L-3-HYDROXYTYROSINE; LEVODOPA; L-3-(3,4DIHYDROXYPHENYL)ALANINE; L-3,4-DIHYDROXYPHENYLALANINE; L-3HYDROXYTYROSINE; L Dopa

