

# **Immunohistochemical localization of D-aspartate in the rat pineal gland**

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## **Abstract**

Specific polyclonal antibody was raised against D-aspartate (D-Asp) which had been conjugated to glutaraldehyde and was purified by affinity chromatography. Immunohistochemical staining of rat pineal gland with the antibody demonstrated the presence of D-Asp in the cytoplasm of pinealocytes, the predominant cell type in this gland. D-Asp immunoreactivity was more evident in the distal region than in the proximal region of the gland. Pinealocytes in the distal region are presumably involved in the synthesis and secretion of the pineal hormone, melatonin, and the results of staining may indicate some yet unknown role of D-Asp in the regulation of melatonin secretion.