

Phosphodiesterases, 3',5'-cyclic nucleotide (PDEs) in GtoPdb v.2023.1

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Abstract

3',5'-Cyclic nucleotide phosphodiesterases (PDEs, 3',5'-cyclic-nucleotide 5'-nucleotidohydrolase), [E.C. 3.1.4.17](#), catalyse the hydrolysis of a 3',5'-cyclic nucleotide (usually [cyclic AMP](#) or [cyclic GMP](#)). [isobutylmethylxanthine](#) is a nonselective inhibitor with an IC₅₀ value in the millimolar range for all isoforms except PDE 8A, 8B and 9A. A 2',3'-cyclic nucleotide 3'-phosphodiesterase ([E.C. 3.1.4.37](#) CNPase) activity is associated with myelin formation in the development of the CNS.

Contents

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