



Constitutive Activities and Inverse Agonism in Dopamine Receptors

Boyang Zhang^{*,†}, Awatif Albaker^{*,†}, Bianca Plouffe^{‡,§},
Caroline Lefebvre^{*,†}, Mario Tiberi^{*,†,1}

^{*}Ottawa Hospital Research Institute (Neuroscience Program), Ottawa, Ontario, Canada

[†]Departments of Medicine, Cellular & Molecular Medicine, Psychiatry, University of Ottawa, Ottawa, Ontario, Canada

[‡]Department of Biochemistry, Université de Montréal, Montréal, Québec, Canada

[§]Institut de recherche en immunologie, cancer, Montréal, Québec, Canada

¹Corresponding author: e-mail address: mtiberi@uottawa.ca

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Abstract

The concept of activation in the absence of agonists has been demonstrated for many GPCRs and is now solidified as one of the principal aspects of GPCR signaling. In this chapter, we review how dopamine receptors demonstrate this ability. Although difficult to prove *in vivo* due to the presence of endogenous dopamine and lack of subtype-selective inverse agonists and “pure” antagonists (neutral ligands), *in vitro* assays such as measuring intracellular cAMP, [³⁵S]GTPγS binding, and [³H]thymidine incorporation