

Salsolinol, free of isosalsolinol, exerts ethanol-like motivational/sensitization effects leading to increases in ethanol intake

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© 2014 Elsevier Inc. Salsolinol is formed non-enzymatically when ethanol-derived acetaldehyde binds to dopamine, yielding 2 distinct products, i.e., salsolinol and isosalsolinol. Early animal studies, revealing that salsolinol promotes alcohol consumption and recent evidence that animals will readily self-administer salsolinol into the posterior ventral tegmental area (p-VTA) together with the finding that salsolinol is able to induce conditioned place preference and to increase locomotor activity, have outlined a role of salsolinol in the behavioral and neurobiological actions of ethanol. Until recently, the only commercially available salsolinol was a mixture containing 85% salsolinol and 10-15% isosalsolinol. The possibility thus exists that either salsolinol or isosalsolinol explains the reinforcing properties of ethanol. We report here that a newly available salsolinol is free of isosalsolinol. Thus, salsolinol, free of isosalsolinol, was injected intracerebrally (30 pmol/0.2 μ L, in