

[J Autism Dev Disord.](#) 2014 Aug;44(8):1833-45. doi: 10.1007/s10803-014-2078-x.

Downregulation of GABAA receptor protein subunits $\alpha 6$, $\beta 2$, δ , ϵ , $\gamma 2$, θ , and $\rho 2$ in superior frontal cortex of subjects with autism.

[Fatemi SH¹](#), [Reutiman TJ](#), [Folsom TD](#), [Rustan OG](#), [Rooney RJ](#), [Thuras PD](#).

[Author information](#)

Abstract

We measured protein and mRNA levels for nine gamma-aminobutyric acid A (GABAA) receptor subunits in three brain regions (cerebellum, superior frontal cortex, and parietal cortex) in subjects with autism versus matched controls. We observed changes in mRNA for a number of GABAA and GABAB subunits and overall reduced protein expression for GABAA receptor alpha 6 (GABR $\alpha 6$), GABAA receptor beta 2 (GABR $\beta 2$), GABAA receptor delta (GABR δ), GABAA receptor epsilon (GABR ϵ), GABAA receptor gamma 2 (GABR $\gamma 2$), GABAA receptor theta (GABR θ), and GABAA receptor rho 2 (GABR $\rho 2$) in superior frontal cortex from subjects with autism. Our data demonstrate systematic changes in GABAA&B subunit expression in brains of subjects with autism, which may help explain the presence of cognitive abnormalities in subjects with autism.

PMID: 24668190

DOI: [10.1007/s10803-014-2078-x](#)