

Benzodiazepine receptors are allosteric modulatory sites on GABAA receptors. GABAA receptors are probably composed of five protein subunits, at least some of which belong to different subunit classes. So far six alpha-, four beta-, three gamma-, and delta- and two rho = p subunits of GABAA receptors have been identified. A large number of different subunit combinations, each of which will result in a GABAA receptor with distinct electrophysiological and pharmacological properties, are therefore possible. Many compounds from different chemical classes which are able to bind to benzodiazepine receptors have been identified. Depending on their individual efficacy, binding of these compounds either enhances, reduces or does not influence GABAergic transmission. However, the individual efficacy of the benzodiazepine receptor ligands changes with the subunit composition of the GABAA receptor. The investigation of the regional distribution, subunit composition and pharmacology of GABAA receptors will result in the development of new and more selective compounds for psychiatry <sup>1)</sup>.

<sup>1)</sup>

Sieghart W. Pharmacology of benzodiazepine receptors: an update. J Psychiatry Neurosci. 1994 Jan;19(1):24-9. Review. PubMed PMID: 8148363; PubMed Central PMCID: PMC1188559.

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