

NORADRENALINE RECEPTORS

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NorAdr Receptors

- Specialized receptors on cells mediate actions of neurotransmitter
 - Change membrane permeability to an ion
 - Activate a second messenger
- **Noradrenaline receptors**
 - $\alpha_1, \alpha_2, \beta_1, \beta_2$
 - Can act both post- and pre-synaptic fashion
 - Noradrenaline targets β_2 (excitatory) and α_2 (inhibitory) in the pre-synaptic region

Adrenergic Receptors and Function

Alpha Receptor

- Vasoconstriction
- Intestinal relaxation
- Intestinal and bladder sphincter contraction

Beta Receptor

- Vasodilatation
- Cardioacceleration
- ↑ myocardial strength
- Intestinal relaxation
- Uterus relaxation
- Bronchodilatation
- Calorigenesis
- Glycogenolysis
- Lipolysis

Video Room

- Where and how does it originate?
- Post-synaptic NorAdr Receptors
- Pre-synaptic NorAdr Receptors
- Positive feedback by β_2 -subunit
- Removal of NorAdr



Thanks



Reference:

<http://www.brainexplorer.org/video/>