

Orexin A/B

Cat.No. 389 104; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: not tested yet IP: not tested yet ICC: not tested yet IHC: 1 : 500 IHC-P/FFPE: 1 : 500
Immunogen	Synthetic peptide corresponding to AA 87 to 96 from mouse Orexin (UniProt Id: O55241)
Reactivity	Reacts with: human, rat, mouse (O55241). Other species not tested yet.
Specificity	Recognizes Orexin A and Orexin B with minor cross-reactivity to the unprocessed precursor protein.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Orexins, also referred to as **Hypocretins**, are produced by specialized neurons in the lateral hypothalamus, which project to many different regions of the brain. Orexin A (33 amino acids) and Orexin B (28 amino acids) are both produced from a single pre-pro-orexin polypeptide by a cascade of enzymatic reactions. They operate via binding to two closely related G protein-coupled receptors called Orexin receptor 1 and 2 (OxR 1 and OxR 2). OxR 1 is selective for Orexin A whereas OxR 2 binds both peptides with similar affinity.

The orexin system is conserved in mammals, and plays a central role in regulating feeding, sleep/wake cycles, arousal, energy expenditure, reward seeking, cognition, and stress responses. Defects in orexin signaling are involved in diet-induced obesity, diabetes, narcolepsy, panic anxiety disorder, depression, and addiction.

Selected General References

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