

PRODUCT INFORMATION

Target	HCRT2
Synonyms	OX2R, Orexin receptor 2, Hypocretin receptor 2
Description	Recombinant human HCRT2 Protein with C-terminal human Fc tag
Delivery	In Stock
Uniprot ID	O43614
Expression Host	HEK293
Tag	C-Human Fc tag
Molecular Characterization	HCRT2(Met1-Lys51) hFc(Glu99-Ala330)
Molecular Weight	The protein has a predicted molecular mass of 32.3 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Storage&Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	HCRT2 (Orexin receptor 2 / Hypocretin receptor 2) is a G-protein coupled receptor (GPCR) expressed in the central nervous system, particularly in hypothalamic neurons. It couples to Gq and Gi/o proteins, activating PLC/Ca ²⁺ signaling and modulating adenylyl cyclase and MAPK pathways. HCRT2 regulates wakefulness, sleep-wake cycles, appetite, and energy homeostasis. Dysregulation is associated with narcolepsy, sleep disorders, and metabolic dysfunctions, making it a therapeutic target for sleep and metabolic disorders.
Usage	Research use only
Conjugate	Unconjugated



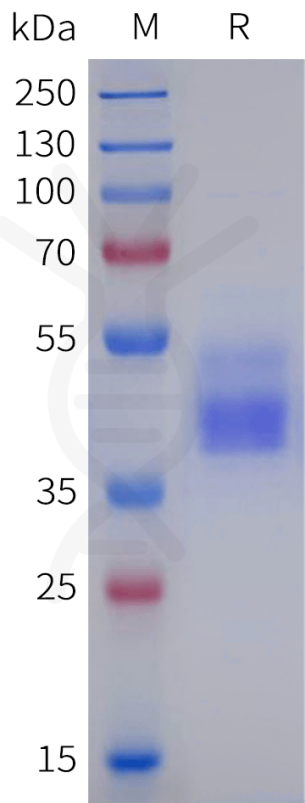


Figure 1. Human HCRT2 Protein, hFc Tag on SDS-PAGE under reducing condition.

