

GPR50 Antibody



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 70-75	Source/Isotype: Rabbit	UniProt ID: #Q13585	Entrez-Gene Id: 9248
-------------------------------	-------------------------	-----------------------------------	---------------------------	----------------------------------	-------------------------------	--------------------------------

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

GPR50 Antibody recognizes endogenous levels of total GPR50 protein.

Species predicted to react based on 100% sequence homology

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly377 of human GPR50 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

G-protein coupled receptor 50 (GPR50) is an orphan G-protein coupled receptor with high sequence homology to the melatonin receptors MT1 and MT2. While classified as a member of the melatonin receptor family and also known as melatonin-related receptor, GPR50 does not bind melatonin (1). GPR50 forms heterodimers with MT1 and MT2 and acts as a negative regulator of MT1 agonist binding and G protein coupling; inhibition of melatonin receptor activity is dependent on the long, proline-rich carboxy terminal tail of GPR50 (2). On a physiological level, GPR50 is involved in the regulation of adaptive thermoregulation in mammals and deletion of *GPR50* in mice produces a profound effect on the response to fasting and facilitates entry into torpor (3). Polymorphisms in the corresponding *GPR50* gene are associated with bipolar affective disorder and major depressive disorder in women, indicating that variation in *GPR50* may be an important gender-specific risk factor for certain mental disorders (4,5).

Background References

1. Reppert, S.M. et al. (1996) *FEBS Lett* 386, 219-24.
2. Levoe, A. et al. (2006) *EMBO J* 25, 3012-23.
3. Bechtold, D.A. et al. (2012) *Curr Biol* 22, 70-7.
4. Macintyre, D.J. et al. (2010) *Neurosci Lett* 475, 169-73.
5. Thomson, P.A. et al. (2005) *Mol Psychiatry* 10, 470-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no

force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.