

**GCNF Antibody**

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<b>Applications:</b> W	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 50	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q15406	<b>Entrez-Gene Id:</b> 2649
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**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**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**

GCNF Antibody detects endogenous levels of total GCNF protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic polypeptide corresponding to residues surrounding Ala349 of human GCNF. Antibodies are purified by Protein A and peptide affinity chromatography.

**Background**

GCNF (Germ Cell Nuclear Factor), also known as NR6A1 (Nuclear Receptor Subfamily 6 Group A member), is an orphan member of the nuclear receptor gene superfamily (1). It has been shown to be expressed in the nervous system during development and during specific stages in maturing germ cells of the ovary and testis in the adult, and has probable roles in gametogenesis, neurogenesis, and normal embryonic development during gastrulation (1,2). Inactivation of GCNF in mouse results in abnormal posterior development, impaired midbrain development, insufficient closure of the neural tube, and eventual embryonic death (3). GCNF has been shown to be a repressor of OCT-4 and of the protamine genes (4,5) and plays a critical role in the control of gene expression during embryogenesis and spermatogenesis (2,6).

**Background References**

1. Lan, Z.J. et al. (2009) *Biol Reprod* 80, 905-12.
2. Lei, W. et al. (1997) *J Mol Endocrinol* 18, 167-76.
3. Chung, A.C. et al. (2001) *Mol Cell Biol* 21, 663-77.
4. Akamatsu, W. et al. (2009) *J Neurosci* 29, 2113-24.
5. Hummelke, G.C. and Cooney, A.J. (2004) *Mol Reprod Dev* 68, 394-407.
6. Lan, Z.J. et al. (2002) *J Biol Chem* 277, 50660-7.

**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 BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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