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# WFS1 Antibody

Store at -20C  
#8749

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 100	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #O76024	<b>Entrez-Gene Id:</b> 7466
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## Product Usage Information

### Application

Western Blotting  
Immunoprecipitation

### Dilution

1:1000  
1:100

## 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

WFS1 Antibody recognizes endogenous levels of total WFS1 protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala43 of human WFS1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Wolfram syndrome protein (WFS1) is an 890 amino acid protein that contains a cytoplasmic N-terminal domain, followed by nine-transmembrane domains and a luminal C-terminal domain. WFS1 is predominantly localized to the endoplasmic reticulum (ER) (1) and its expression is induced in response to ER stress, partially through transcriptional activation (2,3). Research studies have shown that mutations in the WFS1 gene lead to Wolfram syndrome, an autosomal recessive neurodegenerative disorder defined by young-onset, non-immune, insulin-dependent diabetes mellitus and progressive optic atrophy (4).

## Background References

1. Takeda, K. et al. (2001) *Hum Mol Genet* 10, 477-84.
2. Yamaguchi, S. et al. (2004) *Biochem Biophys Res Commun* 325, 250-6.
3. Ueda, K. et al. (2005) *Eur J Endocrinol* 153, 167-76.
4. Inoue, H. et al. (1998) *Nat Genet* 20, 143-8.

## 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 **Mk:** Monkey

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