

Rabbit WFS1 Polyclonal Antibody | anti-WFS1 antibody

Anti-WFS1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125604	Rabbit	Human, Monkey	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

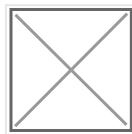
PRODUCT SYNONYMS

WFS1; Polyclonal Antibody; Anti-WFS1 Antibody; Wolframin; wolframin ER transmembrane glycoprotein; anti-WFS1 antibody

PRODUCT SPECIFICATIONS

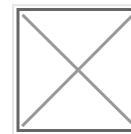
Host	Rabbit
Reactivity	Human, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for WFS1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-WFS1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human WFS1 recombinant protein (Position: A61-H313).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of U2OS cells using anti-WFS1 antibody (AAA125604). Overlay histogram showing U2OS cells stained with AAA125604 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-WFS1 Antibody (AAA125604, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 3. IF analysis of WFS1 using anti-WFS1 antibody (AAA125604). WFS1 was detected in immunocytochemical section of HepG2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-WFS1 Antibody (AAA125604) overnight at 4 degree C. DyLight[®]488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of WFS1 using anti-WFS1 antibody (AAA125604). WFS1 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-WFS1 Antibody (AAA125604) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of WFS1 using anti-WFS1 antibody (AAA125604). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 µg of sample under reducing conditions. Lane 1: human placenta tissue lysates; Lane 2: human T-47D whole cell lysates; Lane 3: monkey lung tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-WFS1 antigen affinity purified polyclonal antibody (Catalog # AAA125604) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for WFS1 at approximately 100KD. The expected band size for WFS1 is at 100KD.

ADDITIONAL INFORMATION

Related Product Information for anti-WFS1 antibody	Wolframin is a protein that in humans is encoded by the WFS1 gene. This gene encodes a transmembrane protein, which is located primarily in the endoplasmic reticulum and ubiquitously expressed with highest levels in brain, pancreas, heart, and insulinoma beta-cell lines. Mutations in this gene are associated with Wolfram syndrome, also called DIDMOAD (Diabetes Insipidus, Diabetes Mellitus, Optic Atrophy, and Deafness), an autosomal recessive disorder. The disease affects the brain and central nervous system. Mutations in this gene can also cause autosomal dominant deafness 6 (DFNA6), also known as DFNA14 or DFNA38. Alternatively spliced transcript variants have been found for this gene.
References	- Berry, V., Gregory-Evans, C., Emmett, W., Waseem, N., Raby, J., Prescott, D., Moore, A. T., Bhattacharya, S. S. Wolfram gene (WFS1) mutation causes autosomal dominant congenital nuclear cataract in humans. <i>Europ. J. Hum. Genet.</i> 21: 1356-1360, 2013. - Bespalova, I. N., Van Camp, G., Bom, S. J. H., Brown, D. J., Cryns, K., DeWan, A. T., Erson, A. E., Flothmann, K., Kunst, H. P. M., Kurnool, P., Sivakumaran, T. A., Cremers, C. W. R. J., Leal, S. M., Burmeister, M., Lesperance, M. M. Mutations in the Wolfram syndrome 1 gene (WFS1) are a common cause of low frequency sensorineural hearing loss. <i>Hum. Molec. Genet.</i> 10: 2501-2508, 2001. - Colosimo, A., Guida, V., Rigoli, L., Di Bella, C., De Luca, A., Briuglia, S., Stuppia, L., Salpietro, D. C., Dallapiccolo, B. Molecular detection of novel WFS1 mutations in patients with Wolfram syndrome by a DHPLC-based assay. <i>Hum. Mutat.</i> 21: 622-629, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	119602804
NCBI GeneID	7466
UniProt Accession #	O76024 ; Q8N6I3 ; Q9UNW6 ; B2R797 ; D3DVT1
Molecular Weight	100,292 Da
NCBI Official Full Name	Wolfram syndrome 1 (wolframin), isoform CRA_a
NCBI Official Synonym Full Names	Wolfram syndrome 1 (wolframin)
NCBI Official Symbol	WFS1
NCBI Official Synonym Symbols	WFS; WFRS; WFSL; CTRCT41
NCBI Protein Information	wolframin
UniProt Protein Name	Wolframin
UniProt Gene Name	WFS1
UniProt Entry Name	WFS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/wfs1-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125604>