## Immunotag™ WFS1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITN3003
Product Description	Immunotag™ WFS1 Polyclonal Antibody
Size	50 μg, 100 μg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	WFS1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human, Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	WFS1 Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	WFS1
Accession No.	O76024 P56695

Antibody Specification	
Description	wolframin ER transmembrane glycoprotein(WFS1) Homo sapiens 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 betacell 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. [provided by RefSeq, Mar 2009],
Protein Expression	Amygdala,Brain,
Subcellular Localization	proteasome complex,endoplasmic reticulum,endoplasmic reticulum membrane,integral component of membrane,integral component of endoplasmic reticulum membrane,dendrite,
Protein Function	disease:Defects in WFS1 are the cause of non-syndromic sensorineural deafness autosomal dominant type 6 (DFNA6) [MIM:600965]; also called non-syndromic sensorineural deafness autosomal dominant type 14 (DFNA14) or non-syndromic sensorineural deafness autosomal dominant type 38 (DFNA38). DFNA6 is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. DFNA6 is a low-frequency hearing loss in which frequencies of 2000 Hz and below are predominantly affected. Many patients have tinnitus, but there are otherwise no associated features such as vertigo. Because high-frequency hearing is generally preserved, patients retain excellent understanding of speech, although presbycusis or noise exposure may cause high-frequency loss later in life. DFNA6 worsens over time without progressing to profound deafness.,disease:Defects in WFS1 are the cause of Wolfram syndrome (WFS) [MIM:222300]; also known as diabetes insipidus and mellitus with optic atrophy and deafness syndrome (DIDMOAD). It is a rare autosomal recessive disorder characterized by juvenile diabetes mellitus, diabetes insipidus, optic atrophy, deafness and various neurological symptoms.,function:Participates in the regulation of cellular Ca(2+) homeostasis, at least partly, by modulating the filling state of the endoplasmic reticulum Ca(2+) store.,polymorphism:Arg-456-His, Arg-611-His and Ile-720-Val polymorphisms are in tight linkage disequilibrium with one another and associated with type 1 diabetes in Japanese.,tissue specificity:Highly expressed in heart followed by brain, placenta, lung and pancreas. Weakly expressed in liver, kidney and skeletal muscle. Also expressed in islet and beta-cell insulinoma cell line.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.