

Anti-Selenoprotein W (RABBIT) Antibody - 600-401-A29

Code: 600-401-A29

Size: 100 µg

Product Description: Anti-Selenoprotein W (RABBIT) Antibody - 600-401-A29

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	SEPW1
Species Reactivity	mouse
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	rabbit anti-Selenoprotein W antibody, Rabbit anti-SeIW antibody
Application Note	This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 9.6 kDa in size corresponding to SeIW by western blotting in the appropriate cell lysate or extract. This antibody is capable of detecting both overexpressed and endogenous SeIW.
Background	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Selenoprotein W was first purified and characterized from rat skeletal muscle. The function of selenoprotein W is not entirely clear, but the presence of the bound glutathione moiety indicates that SeIW is thought to function in oxidation–reduction catalysis and may play a role in selenium deficiency disorders such as white muscle disease in sheep and Keshan disease in humans. Recently, overexpression of SeIW was shown to be glutathione dependent and was shown to markedly reduce the sensitivity of cell lines to H ₂ O ₂ cytotoxicity.
Purity And Specificity	This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for mouse Selenoprotein W. A BLAST analysis was used to suggest cross-reactivity with SeIW from rat based on a 98% homology with the immunizing sequence. Partial reactivity is expected against human-derived SeIW based on an 87% homology with the immunogen. Cross-reactivity with SeIW from other sources has not been determined.
Assay Dilutions	User Optimized
ELISA	1:100,000
Western Blot	1:1,000 - 1:5,000
Other Assays	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to full-length mouse SeIW protein.
General Reference	Whanger, P.D. (2000) Selenoprotein W: a review. <i>Cell Mol. Life Sci.</i> 57(13-14):1846-52. Whanger, P.D., Vendeland, S.C., Gu, Q.P., Beilstein, M.A. and Ream, L.W. (1997) Selenoprotein W cDNAs from five species of animals. <i>Biomed. Environ. Sci.</i> 10(2-3):190-7. Yeh, J.Y., Beilstein, M.A., Andrews, J.S. and Whanger, P.D. (1995) Tissue distribution and influence of selenium status on levels of selenoprotein W. <i>FASEB J.</i> 9(5):392-6. Gu, Q.P., Sun, Y., Ream, L.W. and Whanger, P.D. (2000) Selenoprotein W accumulates primarily in primate skeletal muscle, heart, brain and tongue. <i>Mol. Cell Biochem.</i> 204(1-2):49-56. Vendeland, S.C., Beilstein, M.A., Yeh, J.Y., Ream, W. and Whanger, P.D. (1995) Rat skeletal muscle selenoprotein W: cDNA clone and mRNA modulation by dietary selenium. <i>Proc. Natl Acad. Sci. USA</i> 92(19):8749-53.
Specific Reference	Kipp AP, Frombach J, Deubel S, Brigelius-Flohé R. (2013) Selenoprotein W as biomarker for the efficacy of selenium compounds to act as source for selenoprotein biosynthesis. <i>Methods Enzymol.</i> 2013;527:87-112. doi: 10.1016/B978-0-12-405882-8.00005-2.

Related Products

100-4151	Anti-CATALASE (RABBIT) Antibody - 100-4151
100-4191	Anti-SUPEROXIDE DISMUTASE (RABBIT) Antibody - 100-4191
200-401-999	Anti-Selenophosphate Synthetase 2 (SPS2) (RABBIT) Antibody - 200-401-999
600-401-A29S	Anti-Selenoprotein W (RABBIT) Antibody - 600-401-A29S

Related Links

UniProtKB - P63300

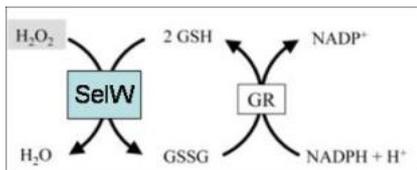
<http://www.uniprot.org/uniprot/P63300>

NCBI - 2384723 <http://www.ncbi.nlm.nih.gov/protein/2384723>

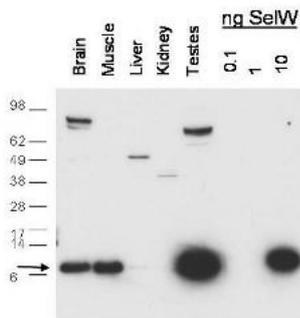
GeneID - 20364

Images

- 1 Proposed pathway for Selenoprotein W function.



- 2 Western blot using Rockland's anti-SelW antibody shows detection of endogenous SelW in mouse brain, muscle and testes lysates. Recombinant SelW is also detected at 10 ng (right lanes). The arrow corresponds with SelW protein at 9.6 kDa. The primary antibody was used at a 1:1000 dilution. Personal Communication, D. Hatfield, NCI, Bethesda, MD.



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