

FOXRED2 Antibody
Catalog # ASC11453**Specification**

FOXRED2 Antibody - Product Information

Application	WB, IF
Primary Accession	Q8IWF2
Other Accession	No. Q8IWF2, 156139139
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	FOXRED2 antibody can be used for detection of FOXRED2 by Western blot at 1 µg/mL. Antibody can also be used for immunofluorescence starting at 20 µg/mL.

FOXRED2 Antibody - Additional Information

Gene ID	80020
Target/Specificity	
FOXRED2;	

Reconstitution & Storage

FOXRED2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

FOXRED2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FOXRED2 Antibody - Protein Information

Name FOXRED2 ([HGNC:26264](#))

Function

Probable flavoprotein which may function in endoplasmic reticulum associated degradation (ERAD). May bind non-native proteins in the endoplasmic reticulum and target them to the ubiquitination machinery for subsequent degradation.

Cellular Location

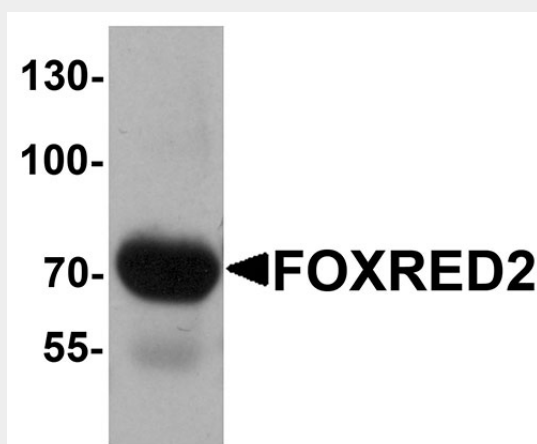
Endoplasmic reticulum lumen {ECO:0000255|PROSITE- ProRule:PRU10138, ECO:0000269|PubMed:19706418}

FOXRED2 Antibody - Protocols

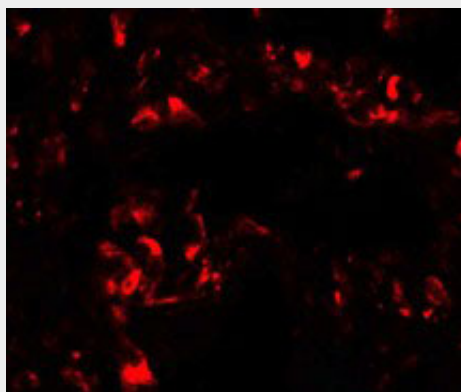
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FOXRED2 Antibody - Images



Western blot analysis of FOXRED2 in human lung tissue lysate with FOXRED2 antibody at 1 μ g/mL.



Immunofluorescence of FOXRED2 in human lung cells with FOXRED2 antibody at 20 μ g/mL.

FOXRED2 Antibody - Background

FOXRED2 Antibody: FOXRED2, also known as ERFAD, is an endoplasmic reticulum (ER) luminal flavoprotein which may function in ER associated degradation (ERAD). It has been proposed to bind non-native proteins in the endoplasmic reticulum and target them to the ubiquitination machinery for subsequent degradation. Upon knockdown of FOXRED2, the degradation of the ERAD model substrate ribophorin 332 is delayed, and the overall level of polyubiquitinated cellular proteins is decreased. Defects in the related protein FOXRED1 are a cause of mitochondrial complex I deficiency (MT-C1D), suggesting the FOXRED2 may also play a role in MT-C1D.

FOXRED2 Antibody - References

Riemer J, Appenzeller-Herzog C, Johansson L, et al. A luminal flavoprotein in endoplasmic reticulum-associated degradation. *Proc. Natl. Acad. Sci. USA* 2009; 106:14831-6.

Riemer J, Hansen HG, Appenzeller-Herzog C, et al. Identification of the PDI-family member ERp90 as an interaction partner of ERFAD. *PLoS One* 2011; 6:e17037

Calvo SE, Tucker EJ, Compton AG, et al. High-throughput, pooled sequencing identifies mutations in NUBPL and FOXRED1 in human complex I deficiency. *Nat. Genet.* 2010; 42:851-8.