10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# LYRM4 Antibody (Center)
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP10681C**

## Specification

### LYRM4 Antibody (Center) - Product Information

| | |
|---|---|
| Application | **FC, IHC-P, WB,E** |
| Primary Accession | Q9HD34 |
| Other Accession | NP_065141.3 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **10758** |
| Antigen Region | **43-69** |

### LYRM4 Antibody (Center) - Additional Information

**Gene ID** 57128

**Other Names**
LYR motif-containing protein 4, LYRM4, C6orf149, ISD11

**Target/Specificity**
This LYRM4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 43-69 amino acids from the Central region of human LYRM4.

**Dilution**
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
LYRM4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### LYRM4 Antibody (Center) - Protein Information

**Name** LYRM4 (HGNC:21365)

**Synonyms** C6orf149, ISD11

**Function** Stabilizing factor, of the core iron-sulfur cluster (ISC) assembly complex, that regulates, in association with NDUFAB1, the stability and the cysteine desulfurase activity of NFS1 and participates in the [2Fe-2S] clusters assembly on the scaffolding protein ISCU (PubMed:17331979, PubMed:31664822). The core iron-sulfur cluster (ISC) assembly complex is involved in the de novo synthesis of a [2Fe-2S] cluster, the first step of the mitochondrial iron-sulfur protein biogenesis. This process is initiated by the cysteine desulfurase complex (NFS1:LYRM4:NDUFAB1) that produces persulfide which is delivered on the scaffold protein ISCU in a FXN-dependent manner. Then this complex is stabilized by FDX2 which provides reducing equivalents to accomplish the [2Fe-2S] cluster assembly. Finally, the [2Fe-2S] cluster is transferred from ISCU to chaperone proteins, including HSCB, HSPA9 and GLRX5 (By similarity). May also participates in the iron-sulfur protein biogenesis in the cytoplasm through its interaction with the cytoplasmic form of NFS1 (PubMed:19454487).

**Cellular Location**
Mitochondrion. Nucleus

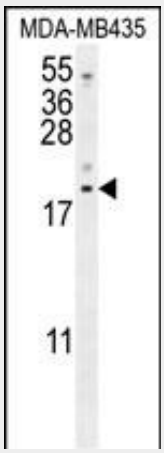
**Tissue Location**
Reduced mRNA levels in Friedreich ataxia patients.

## LYRM4 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## LYRM4 Antibody (Center) - Images




LYRM4 Antibody (Center) (Cat. #AP10681c) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the LYRM4 antibody detected the LYRM4 protein (arrow).

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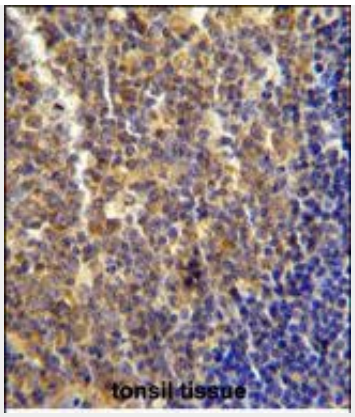
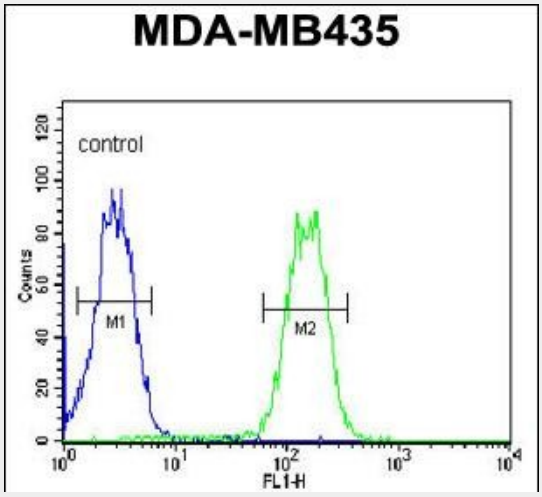



LYRM4 antibody (Center) (Cat. #AP10681c) immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsil tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LYRM4 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.




LYRM4 Antibody (Center) (Cat. #AP10681c) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**LYRM4 Antibody (Center) - Background**

Required for nuclear and mitochondrial iron-sulfur protein biosynthesis.

**LYRM4 Antibody (Center) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Henckaerts, L., et al. Clin. Gastroenterol. Hepatol. 7(9):972-980(2009)
Shi, Y., et al. Hum. Mol. Genet. 18(16):3014-3025(2009)
Weersma, R.K., et al. Am. J. Gastroenterol. 104(3):630-638(2009)