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EDEM2 Antibody (clone 2E4)
Mouse Monoclonal Antibody
Catalog # ALS13491

Specification

EDEM2 Antibody (clone 2E4) - Product Information

Application	**IHC**
Primary Accession	Q9BV94
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**65kDa KDa**

EDEM2 Antibody (clone 2E4) - Additional Information

Gene ID 55741

Other Names
ER degradation-enhancing alpha-mannosidase-like protein 2, EDEM2, C20orf31, C20orf49

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
EDEM2 Antibody (clone 2E4) is for research use only and not for use in diagnostic or therapeutic procedures.

EDEM2 Antibody (clone 2E4) - Protein Information

Name EDEM2

Synonyms C20orf31, C20orf49

Function
Involved in the endoplasmic reticulum-associated degradation (ERAD) pathway that targets misfolded glycoproteins for degradation in an N-glycan-dependent manner (PubMed:15537790, PubMed:25092655). May initiate ERAD by promoting the first mannose trimming step of ERAD substrates, from Man9GlcNAc2 to Man8GlcNAc2 (PubMed:25092655). Seems to recognize and bind to exposed hydrophobic regions in target proteins (By similarity).

Cellular Location
Endoplasmic reticulum lumen

Tissue Location
Expressed ubiquitously in all tissues tested with slightly higher levels detected in small intestine

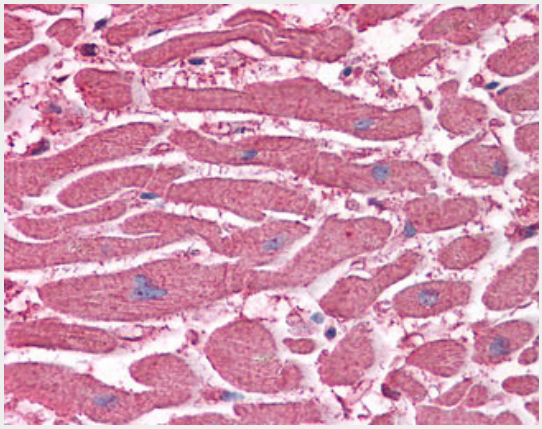
and peripheral blood leukocytes and weakest levels in brain and skeletal muscle

EDEM2 Antibody (clone 2E4) - Protocols

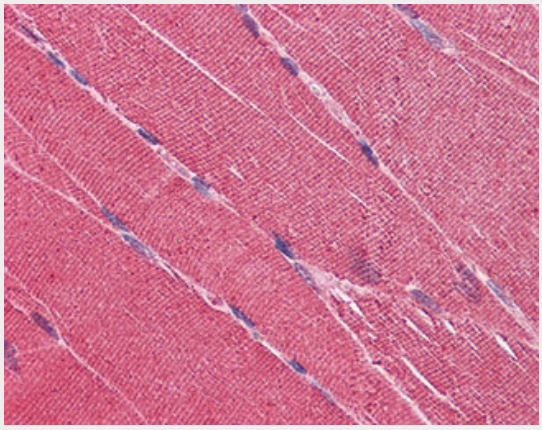
Provided below are standard protocols that you may find useful for product applications.

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

EDEM2 Antibody (clone 2E4) - Images



Anti-EDEM2 / C20orf31 antibody IHC of human heart.



Anti-EDEM2 / C20orf31 antibody IHC of human skeletal muscle.

EDEM2 Antibody (clone 2E4) - Background

Initiates the endoplasmic reticulum-associated degradation (ERAD) that targets misfolded glycoproteins for degradation in an N-glycan-dependent manner. Catalyzes the first mannose trimming step, from Man9GlcNAc2 to Man8GlcNAc2 (PubMed:25092655). Extracts misfolded glycoproteins, but not glycoproteins undergoing productive folding, from the calnexin cycle.

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EDEM2 Antibody (clone 2E4) - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.