

ERG25 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13954b**Specification**

ERG25 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q15800](#)**ERG25 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 6307

Other Names

Methylsterol monooxygenase 1, C-4 methylsterol oxidase, MSMO1, DESP4, ERG25, SC4MOL

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13954b was selected from the C-term region of ERG25. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ERG25 Antibody (C-term) Blocking peptide - Protein Information

Name MSMO1

Synonyms DESP4, ERG25, SC4MOL

Function

Catalyzes the three-step monooxygenation required for the demethylation of 4,4-dimethyl and 4alpha-methylsterols, which can be subsequently metabolized to cholesterol (PubMed:21285510, PubMed:23583456, PubMed:26114596, PubMed:28673550, PubMed:36958722). Also involved in drug metabolism, as it can metabolize eldecalcitol (ED-71 or 1alpha,25-dihydroxy-2beta-(3-hydroxypropoxy)-cholecalciferol), a second-generation vitamin D analog, into 1alpha,2beta,25-trihydroxy vitamin D3; this reaction occurs via enzymatic hydroxylation and spontaneous O-dehydroxypropylation (PubMed:26038696).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

ERG25 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ERG25 Antibody (C-term) Blocking peptide - Images**ERG25 Antibody (C-term) Blocking peptide - Background**

Sterol-C4-methyl oxidase-like protein was isolated based on its similarity to the yeast ERG25 protein. It contains a set of putative metal binding motifs with similarity to that seen in a family of membrane desaturases-hydroxylases. The protein is localized to the endoplasmic reticulum membrane and is believed to function in cholesterol biosynthesis. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

ERG25 Antibody (C-term) Blocking peptide - References

Lu, Y., et al. J. Lipid Res. 49(12):2582-2589(2008) Lim, J., et al. Cell 125(4):801-814(2006) Li, L., et al. J. Biol. Chem. 271(28):16927-16933(1996)