

**ERG25 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13954b****Specification**

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**ERG25 Antibody (C-term) - Product Information**

|                   |  |
|-------------------|--|
| Application       | <b>WB, IHC-P,E</b>   |
| Primary Accession | <a href="#">O15800</a>                                       |
| Other Accession   | <a href="#">NP_006736.1</a> , <a href="#">NP_001017369.1</a> |
| Reactivity        | <b>Human</b>   |
| Host              | <b>Rabbit</b>  |
| Clonality         | <b>Polyclonal</b>  |
| Isotype           | <b>Rabbit IgG</b>  |
| Calculated MW     | <b>35216</b>   |
| Antigen Region    | <b>264-293</b>   |

**ERG25 Antibody (C-term) - Additional Information****Gene ID** 6307**Other Names**

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

**Target/Specificity**

This ERG25 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 264-293 amino acids from the C-terminal region of human ERG25.

**Dilution**WB~~1:1000  
IHC-P~~1:10~50**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**

ERG25 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ERG25 Antibody (C-term) - Protein Information****Name** MSMO1**Synonyms** DESP4, ERG25, SC4MOL

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

#### Cellular Location

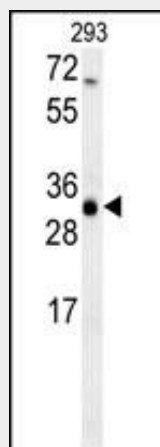
Endoplasmic reticulum membrane; Multi-pass membrane protein

#### ERG25 Antibody (C-term) - Protocols

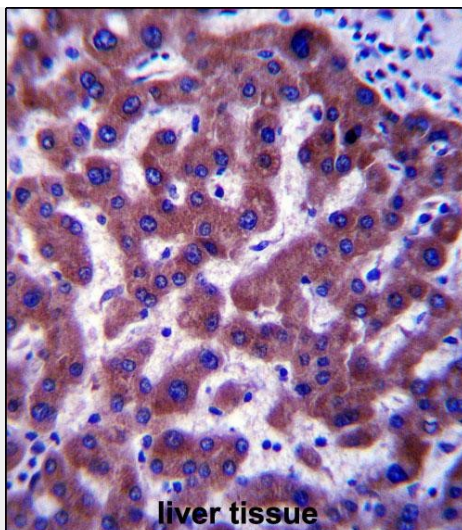
Provided below are standard protocols that you may find useful for product applications.

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

#### ERG25 Antibody (C-term) - Images



ERG25 Antibody (C-term) (Cat. #AP13954b) western blot analysis in 293 cell line lysates (35 $\mu$ g/lane). This demonstrates the ERG25 antibody detected the ERG25 protein (arrow).



ERG25 Antibody (C-term) (Cat. #AP13954b) immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ERG25 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **ERG25 Antibody (C-term) - 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) - 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)