

### Anti-ROR gamma antibody [EPR20006] ab207082

リコンビナント RabMAb

★★★★★ **4 Abreviews** **27 References** **画像数 8**

#### 製品の概要

製品名	Anti-ROR gamma antibody [EPR20006]
製品の詳細	Rabbit monoclonal [EPR20006] to ROR gamma
由来種	Rabbit
特異性	Our data suggests that this antibody is specific to ROR gamma isoform 2 which is known as ROR gammaT.
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), IHC-P, WB, IP
種交差性	<b>交差種:</b> Mouse
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: His-tagged mouse ROR gamma recombinant protein (aa 1-266); Mouse thymus lysate. IHC-P: Mouse thymus and spleen tissues. Flow Cyt (intra): Mouse thymocytes. IP: Mouse thymus lysate.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名                   EPR20006  
アイソタイプ                IgG

#### アプリケーション

**The Abpromise guarantee**        **Abpromise保証は、次のテスト済みアプリケーションにおけるab207082の使用に適用されず**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/50.
IHC-P		1/3000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Antigen Retrieval Buffer (100X Tris-EDTA Buffer, pH 9.0) ( <b>ab93684</b> )
WB		1/2000. Detects a band of approximately 58 kDa (predicted molecular weight: 58 kDa).
IP		1/30.

#### ターゲット情報

##### 機能

Nuclear receptor that binds DNA as a monomer to ROR response elements (RORE) containing a single core motif half-site 5'-AGGTCA-3' preceded by a short A-T-rich sequence. Key regulator of cellular differentiation, immunity, peripheral circadian rhythm as well as lipid, steroid, xenobiotics and glucose metabolism (PubMed:19381306, PubMed:19965867, PubMed:22789990, PubMed:26160376, PubMed:20203100). Considered to have intrinsic transcriptional activity, have some natural ligands like oxysterols that act as agonists (25-hydroxycholesterol) or inverse agonists (7-oxygenated sterols), enhancing or repressing the transcriptional activity, respectively (PubMed:19965867, PubMed:22789990). Recruits distinct combinations of cofactors to target gene regulatory regions to modulate their transcriptional expression, depending on the tissue, time and promoter contexts. Regulates the circadian expression of clock genes such as CRY1, ARNTL/BMAL1 and NR1D1 in peripheral tissues and in a tissue-selective manner. Competes with NR1D1 for binding to their shared DNA response element on some clock genes such as ARNTL/BMAL1, CRY1 and NR1D1 itself, resulting in NR1D1-mediated repression or RORC-mediated activation of the expression, leading to the circadian pattern of clock genes expression. Therefore influences the period length and stability of the clock. Involved in the regulation of the rhythmic expression of genes involved in glucose and lipid metabolism, including PLIN2 and AVPR1A (PubMed:19965867). Negative regulator of adipocyte differentiation through the regulation of early phase genes expression, such as MMP3. Controls adipogenesis as well as adipocyte size and modulates insulin sensitivity in obesity. In liver, has specific and redundant functions with RORA as positive or negative modulator of expression of genes encoding phase I and Phase II proteins involved in the metabolism of lipids, steroids and xenobiotics, such as SULT1E1. Also plays also a role in the regulation of hepatocyte glucose metabolism through the regulation of G6PC and PCK1 (PubMed:19965867). Regulates the rhythmic expression of PROX1 and promotes its nuclear localization (PubMed:19381306, PubMed:19965867, PubMed:22789990, PubMed:26160376, PubMed:20203100). Plays an indispensable role in the

induction of IFN-gamma dependent anti-mycobacterial systemic immunity (PubMed:26160376). Isoform 2: Essential for thymopoiesis and the development of several secondary lymphoid tissues, including lymph nodes and Peyer's patches. Required for the generation of LT $\alpha$  (lymphoid tissue inducer) cells. Regulates thymocyte survival through DNA-binding on ROREs of target gene promoter regions and recruitment of coactivators via the AF-2. Also plays a key role, downstream of IL6 and TGFB and synergistically with RORA, for lineage specification of uncommitted CD4(+) T-helper (T(H)) cells into T(H)17 cells, antagonizing the T(H)1 program. Probably regulates IL17 and IL17F expression on T(H) by binding to the essential enhancer conserved non-coding sequence 2 (CNS2) in the IL17-IL17F locus. May also play a role in the pre-TCR activation cascade leading to the maturation of alpha/beta T-cells and may participate in the regulation of DNA accessibility in the TCR-J(alpha) locus.

#### 組織特異性

Isoform 1 is widely expressed in many tissues, including liver and adipose, and highly expressed in skeletal muscle. Isoform 2 is primarily expressed in immature thymocytes.

#### 関連疾患

Immunodeficiency 42

#### 配列類似性

Belongs to the nuclear hormone receptor family. NR1 subfamily.  
Contains 1 nuclear receptor DNA-binding domain.

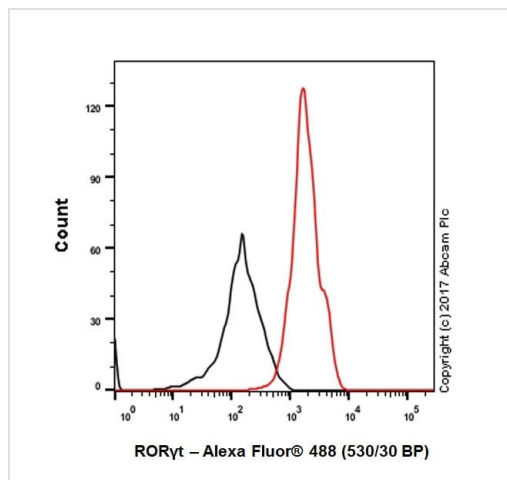
#### ドメイン

The AF-2 (activation function-2) motif is required for recruiting coregulators containing LXXLL motifs such as NCOA1 and NCOA2.

#### 細胞内局在

Nucleus.

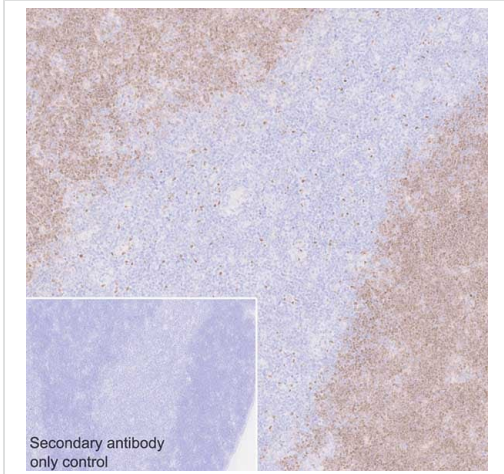
#### 画像



Flow Cytometry (Intracellular) - Anti-ROR gamma antibody [EPR20006] (ab207082)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed Mouse thymocytes labeling ROR gamma with ab207082 at 1/50 dilution. Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488) at 1/2000 dilution was used as the secondary antibody.

Note: Cell surface staining with PE conjugated anti-mouse CD8 and Alexa Fluor<sup>®</sup> 647 conjugated anti mouse CD4 antibodies, followed by fixation with 4% PFA for 10 min and intracellular staining with ab207082. The image shows thymocytes in the CD4+CD8+ (red) or the CD4+CD8- (black, negative control) gate.



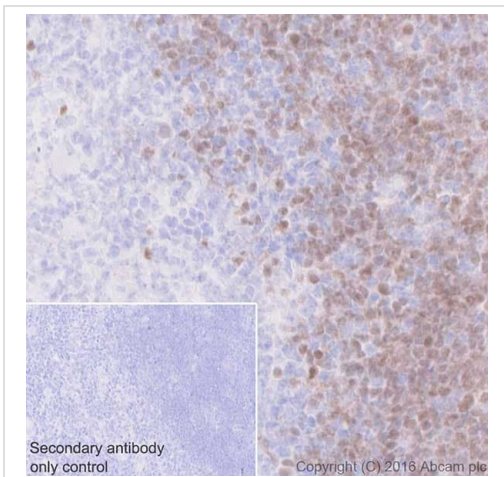
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ROR gamma antibody [EPR20006] (ab207082)

Immunohistochemical analysis of paraffin-embedded mouse thymus tissue labeling ROR gamma with ab207082 at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on mouse thymus cortex, located in the left and right of the image, with sporadic nuclear staining on medulla, middle region (PMID:14691482).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



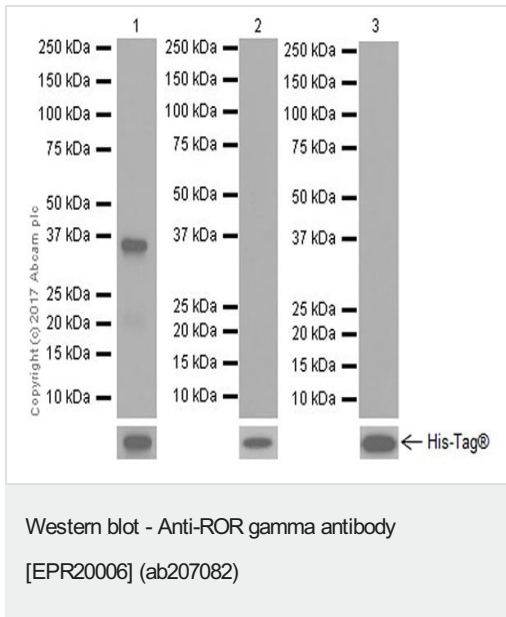
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ROR gamma antibody [EPR20006] (ab207082)

Immunohistochemical analysis of paraffin-embedded mouse thymus tissue labeling ROR gamma with ab207082 at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Nuclear staining on the cortical region of mouse thymus shown at a high magnification (400x) (PMID:14691482).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



**Lane 1** : Anti-ROR gamma antibody [EPR20006] (ab207082) at 1/10000 dilution

**Lanes 2-3** : Anti-ROR gamma antibody [EPR20006] (ab207082) at 1/1000 dilution

**Lane 1** : His-tagged mouse ROR gamma recombinant protein (aa 1-266)

**Lane 2** : His-tagged mouse ROR alpha recombinant protein (aa 48-215)

**Lane 3** : His-tagged mouse ROR beta recombinant protein (aa 9-140)

Lysates/proteins at 0.01 µg per lane.

#### Secondary

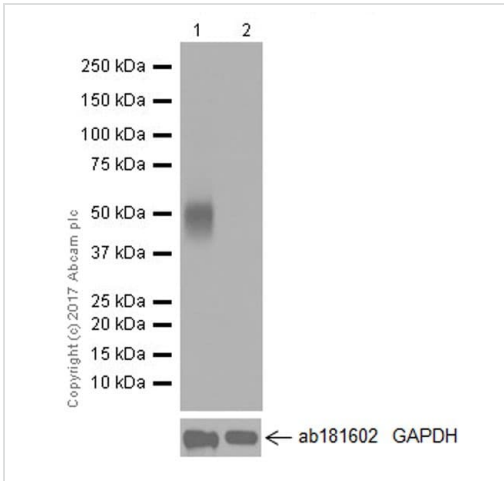
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

**Predicted band size:** 58 kDa

**Observed band size:** 35 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 seconds; Lane 2/3: 3 minutes.



Western blot - Anti-ROR gamma antibody  
[EPR20006] (ab207082)

**All lanes** : Anti-ROR gamma antibody [EPR20006] (ab207082) at 1/2000 dilution

**Lane 1** : Mouse thymus lysate

**Lane 2** : Mouse liver lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

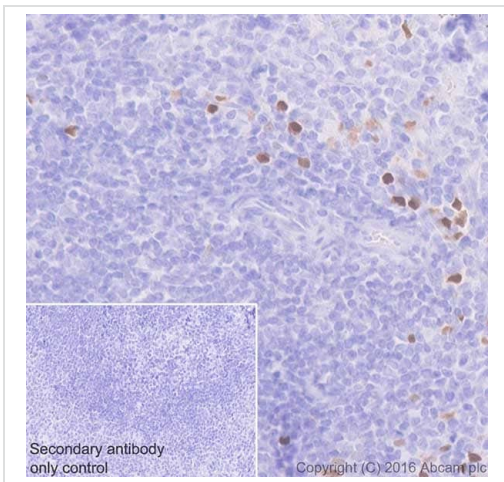
**Predicted band size:** 58 kDa

**Observed band size:** 58 kDa

**Exposure time:** 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile is consistent with the literature: PMID 14691482; PMID 9881970.



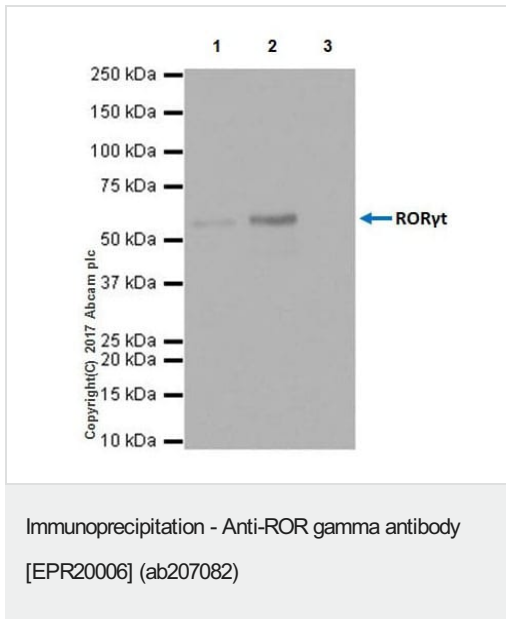
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ROR gamma antibody [EPR20006] (ab207082)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling ROR gamma with ab207082 at 1/3000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Sporadic nuclear staining on mouse spleen (PMID:14691482).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



ROR gamma was immunoprecipitated from 0.35 mg of Mouse thymus lysate with ab207082 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab207082 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

Lane 1: Mouse thymus lysate, 10 µg (Input).

Lane 2: ab207082 IP in Mouse thymus lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab207082 in Mouse thymus lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 10 seconds.

Why choose a recombinant antibody?

- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Anti-ROR gamma antibody [EPR20006] (ab207082)

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