

### Anti-Lipocalin-2 / NGAL antibody [EPR5084] ab125075

KO 評価済 リコンビナント RabMAb

★★★★★ **1 Abreviews** **10 References** 画像数 5

#### 製品の概要

製品名	Anti-Lipocalin-2 / NGAL antibody [EPR5084]
製品の詳細	Rabbit monoclonal [EPR5084] to Lipocalin-2 / NGAL
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB, IHC-P, ICC/IF <b>適用なし:</b> Flow Cyt or IP
種交差性	<b>交差種:</b> Human
免疫原	Synthetic peptide within Human Lipocalin-2/ NGAL aa 50-150. The exact sequence is proprietary. (Peptide available as <b>ab187960</b> )
ポジティブ・コントロール	WB: Human fetal kidney lysate and SW480 cell lysate. IHC-P: human kidney tissue
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 <b><a href="#">see here</a></b>.</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 <b><a href="#">RabMAb<sup>®</sup> patents</a></b>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EPR5084
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ab125075の使用に適用されます**  
 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検討ください。

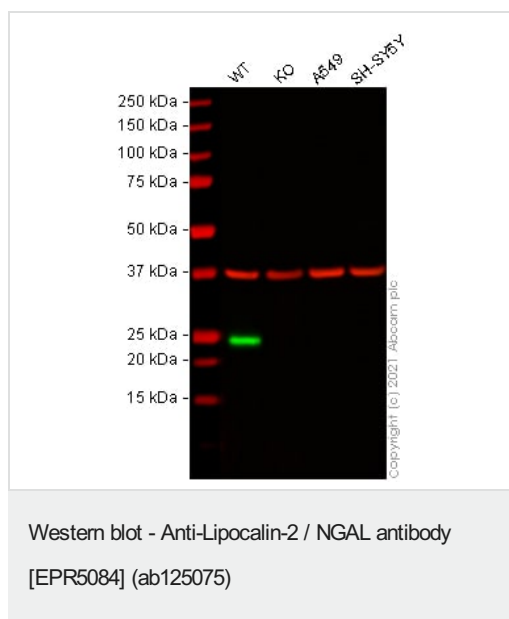
アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 23 kDa. Can be blocked with <b>Lipocalin-2 / NGAL peptide (ab187960)</b> .
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
ICC/IF		1/100 - 1/250.

**追加情報** Is unsuitable for Flow Cyt or IP.

## ターゲット情報

<b>機能</b>	Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron-free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. Involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis, while iron-free form decreases intracellular iron levels, inducing expression of the proapoptotic protein BCL2L11/BIM, resulting in apoptosis. Involved in innate immunity, possibly by sequestering iron, leading to limit bacterial growth.
<b>組織特異性</b>	Expressed in bone marrow and in tissues that are prone to exposure to microorganism. High expression is found in bone marrow as well as in uterus, prostate, salivary gland, stomach, appendix, colon, trachea and lung. Not found in the small intestine or peripheral blood leukocytes.
<b>配列類似性</b>	Belongs to the calycin superfamily. Lipocalin family.
<b>細胞内局在</b>	Secreted. Upon binding to the SLC22A17 (24p3R) receptor, it is internalized.

## 画像



**All lanes :** Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075) at 1/1000 dilution

**Lane 1 :** Wild-type SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

**Lane 2 :** LCN2 knockout SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

**Lane 3 :** A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 4 :** SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

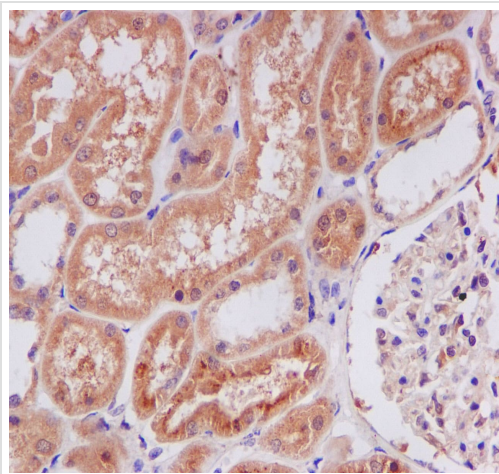
Performed under reducing conditions.

**Predicted band size:** 23 kDa

**Observed band size:** 23 kDa

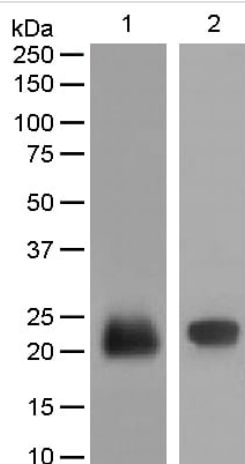
**Lanes 1 -4:** Merged signal (red and green). Green - ab125075 observed at 23 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab125075 was shown to react with Lipocalin-2 / NGAL in wild-type SW480 cells in Western blot with loss of signal observed in LCN2 knockout cell line **ab270486** (knockout cell lysate **ab270509**). Wild-type SW480 and LCN2 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab125075 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075)

Immunohistochemical analysis of paraffin-embedded human kidney tissue sections labeling Lipocalin-2 / NGAL with purified ab125075 at 1/100 dilution. ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated antigen retrieval using citrate buffer, pH 6.0).



Western blot - Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075)

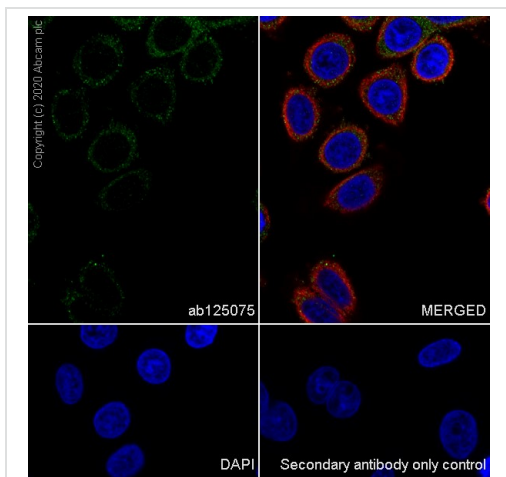
**All lanes :** Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075) at 1/1000 dilution

**Lane 1 :** Human fetal kidney lysate

**Lane 2 :** SW480 (Human colorectal adenocarcinoma cell line) cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 23 kDa







Immunocytochemistry/ Immunofluorescence - Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075)

Immunocytochemistry analysis of SW480 (human colorectal adenocarcinoma epithelial cell) labeling Lipocalin-2 / NGAL with purified ab125075 at 1/250 dilution (10 µg/ml). Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/1000 (2 µg/ml) was used as the secondary antibody. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.9 µg/ml) was used as counterstain. Nuclei were stained blue with DAPI.

Negative control: PBS instead of the primary antibody.

Why choose a recombinant antibody?

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

Anti-Lipocalin-2 / NGAL antibody [EPR5084] (ab125075)

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