# abcam

# Product datasheet

# Anti-Prolactin Receptor/PRL-R antibody [U5] ab2772

★★★★★ 3 Abreviews 20 References 6 图像

概述

产品名称 Anti-Prolactin Receptor/PRL-R抗体[U5]

**抽述** 小鼠单克隆抗体[U5] to Prolactin Receptor/PRL-R

宿主 Mouse

特异性 Detects prolactin (PRL) receptor.

经测试应用 适用于: Flow Cyt, IHC-P, ICC/IF, IP, Inhibition Assay, IHC-Fr, WB

种属反应性 与反应: Rat, Sheep, Rabbit, Horse, Human, Pig

预测可用于: Non human primates 4

免疫原 Full length native protein (purified) corresponding to Rat Prolactin Receptor/PRL-R. Purified rat

liver PRL receptor.

表位 This antibody has been shown to react with the extracellular portion of the receptor, but not in the

ligand binding domain.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.05% Sodium azide

Constituent: PBS

纯**度** Protein G purified

Primary antibody说明 Prolactin (PRL) is a hormone involved in a variety of important functions including ion transport

and osmoregulation, stimulation of milk, protein synthesis as well as the regulation of numerous reproductive functions. PRL exerts its influence on different cell types through a signal transduction

pathway which begins with the binding of the hormone to a transmembrane PRL receptor.

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Immunoreactive PRL receptor, a member of the cytokine receptor family, varies in size (short and long forms) with tissue source and species, from ~40 kDa to 100 kDa. The PRL receptor consists of at least three separate domains: an extracellular region with 5 cysteines which contains the prolactin binding site, a single transmembrane domain and a cytoplasmic region, the length of which appears to influence ligand binding and regulate cellular function.

**克隆** 单克隆

**克隆编号** U5 **同种型** IgG1

应用

## The Abpromise guarantee Abpromise™承诺保证使用ab2772于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use 2µg for 10 <sup>6</sup> cells.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P	<b>★★★</b> ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★	Use at an assay dependent concentration.
ICC/IF		1/20.
IP		Use at an assay dependent concentration.
Inhibition Assay		Use at an assay dependent concentration.
IHC-Fr	<b>★★★</b> ☆☆ (1)	Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 70 kDa.  This antibody detects an ~40 kDa protein and an ~100 kDa protein representing both the short and long forms of the PRL receptor, respectively, in various tissues.ab2772, after biotinylation, has been used to detect Human lymphocyte PRL receptor by FACS. ab2772 does not inhibit the interaction of

靶标

功能 This is a receptor for the anterior pituitary hormone prolactin (PRL). Isoform 4 is unable to

transduce prolactin signaling. Isoform 6 is unable to transduce prolactin signaling.

组织特异性 Expressed in breast, placenta, kidney, liver and pancreas.

序列相似性 Belongs to the type I cytokine receptor family. Type 1 subfamily.

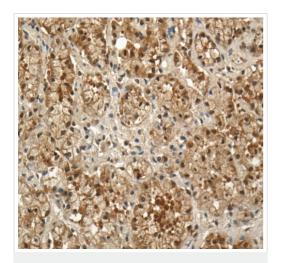
Contains 2 fibronectin type-III domains.

结构域 The WSXWS motif appears to be necessary for proper protein folding and thereby efficient

intracellular transport and cell-surface receptor binding.

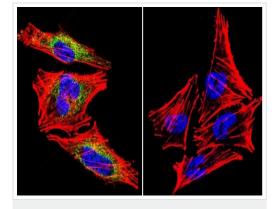
The box 1 motif is required for JAK interaction and/or activation.

#### 图片



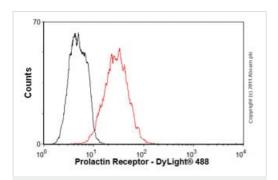
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

Mammary gland tissue from lactating light horse mare was incubated with ab2772 at 1:100 for 1 hour at 23°C and for 24 hours at 4°C. A biotin-conjugated goat anti-mouse IgG was used as the secondary antibody (23°C for 1 hour) .Development using avidin-biotin complex 23°C for 1 hour plus 3,3-diaminobenzadine for 15 min and counterstained with haematoxylin. Antigen retrieval was facilitated using steaming at 95°C for 20 min in Trizma® buffer (pH 10.0) . Blocking endogenous peroxidase performed with 0.3% H2O2 and MeOH (20 min at 23°C). To decrease non-specific staining, tissue was pre-incubated in normal goat serum for 30 min at 23°C.



Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

Immunocytochemistry/Immunofluorescence analysis of Prolactin Receptor/PRL-R shows staining in A2058 cells. Prolactin Receptor/PRL-R (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2772 (1:20) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



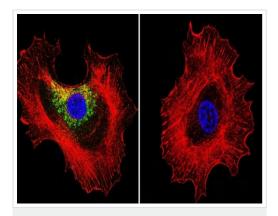
Flow Cytometry - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

Overlay histogram showing MCF-7 cells stained with ab2772 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block nonspecific protein-protein interactions. The cells were then incubated with the antibody (ab2772, 2 $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2 $\mu$ g/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

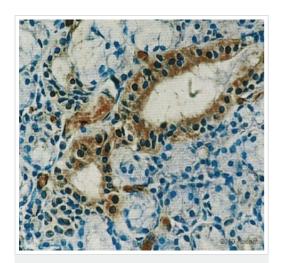
Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

Immunocytochemistry/Immunofluorescence analysis of Prolactin Receptor/PRL-R shows staining in HepG2 cells. Prolactin Receptor/PRL-R (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2772 (1:20) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

Immunocytochemistry/Immunofluorescence analysis of Prolactin Receptor/PRL-R shows staining in MCF-7 cells. Prolactin Receptor/PRL-R (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with ab2772 (1:20) over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Images were taken at 60X magnification.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prolactin Receptor/PRL-R antibody [U5] (ab2772)

This image is courtesy of an anonymous Abreview

ab2772 staining the Prolactin Receptor/PRL-R in Human salivary gland tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 10% serum for 1 hour at 20°C; antigen retrieval was not performed. Samples were incubated with primary antibody (1/100) for 12 hours at 4°C. A Biotin-conjugated Rabbit anti-mouse polyclonal (1/200) was used as the secondary antibody.

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