# abcam

## Product datasheet

# Anti-Prolactin Receptor/PRL-R antibody [T6] ab2773

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Overview

Product name Anti-Prolactin Receptor/PRL-R antibody [T6]

**Description** Mouse monoclonal [T6] to Prolactin Receptor/PRL-R

Host species Mouse

**Specificity** Detects Prolactin Receptor/PRL-R in rat tissues. This antibody does not cross-react with Growth

Hormone (GH) receptor. By Western blot, this antibody detects an ~42 kDa protein representing

Prolactin Receptor/PRL-R in NB2 cell lysate. Immunohistochemical staining of Prolactin Receptor/PRL-R in NB2 cells yields a staining pattern consistent with cytoplasmic vesicular staining. This antibody has also been used to inhibit the binding of prolactin to Prolactin

Receptor/PRL-R in vitro.

Tested applications
Suitable for: IHC-P, ICC/IF
Species reactivity
Reacts with: Rat, Human

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

liver PRL receptor.

**Positive control** IHC-P: Rat pituitary gland tissue. ICC: C6, H-4-II-E, SW480 cells.

**General notes**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

**Properties** 

Form Liquid

Storage instructions 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.

Storage buffer Constituent: PBS

Purity Protein A purified

**Primary antibody notes** 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. 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.

**Clonality** Monoclonal

Clone number T6

Isotype IgG2a

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab2773 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/25 - 1/200.
ICC/IF		1/200.

### **Target**

**Function** 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.

**Tissue specificity** Expressed in breast, placenta, kidney, liver and pancreas.

**Sequence similarities** Belongs to the type I cytokine receptor family. Type 1 subfamily.

Contains 2 fibronectin type-III domains.

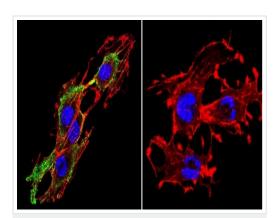
**Domain** The WSXWS motif appears to be necessary for proper protein folding and thereby efficient

intracellular transport and cell-surface receptor binding.

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

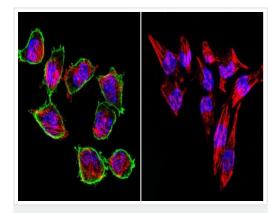
**Cellular localization** Secreted and Membrane.

#### **Images**



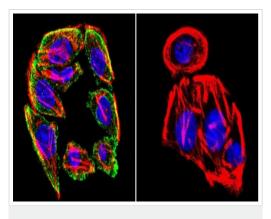
Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [T6] (ab2773)

Immunocytochemical analysis of C6 (Rat glial tumor cell line) cells labeling Prolactin Receptor/PRL-R. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incbated without (control) or with ab2773 (1:200) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Prolactin Receptor/PRL-R staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



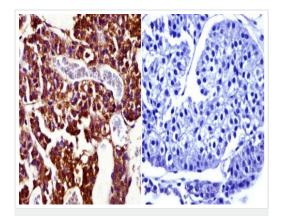
Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [T6] (ab2773)

Immunocytochemical analysis of H-4-II-E (Rat hepatoma cell line) cells labeling Prolactin Receptor/PRL-R. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incbated without (control) or with ab2773 (1:200) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Prolactin Receptor/PRL-R staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



Immunocytochemistry/ Immunofluorescence - Anti-Prolactin Receptor/PRL-R antibody [T6] (ab2773)

Immunocytochemical analysis of in SW480 (Human colorectal adenocarcinoma cell line) cells labeling Prolactin Receptor/PRL-R. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were incbated without (control) or with ab2773 (1:200) overnight at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. Prolactin Receptor/PRL-R staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prolactin Receptor/PRL-R antibody [T6] (ab2773)

Immunohistochemical analysis of normal biopsies of deparaffinized rat pituitary gland tissue labeling Prolactin Receptor/PRL-R. To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature and incubated with ab2773 (1:50) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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