Progesterone Receptor Monoclonal Antibody
(hPRa 6)

Catalog Number MA5-12653

Details

<table>
<thead>
<tr>
<th>Size</th>
<th>500 µL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host/Isotope</td>
<td>Mouse / IgG2b</td>
</tr>
<tr>
<td>Class</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Type</td>
<td>Antibody</td>
</tr>
<tr>
<td>Clone</td>
<td>hPRa 6</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Partially purified PgR from a human endometrial carcinoma (EnCa 101) grown in athymic mice</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Unconjugated</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.2 mg/mL</td>
</tr>
<tr>
<td>Purification</td>
<td>Protein A</td>
</tr>
<tr>
<td>Storage buffer</td>
<td>PBS, pH 7.4, with 0.2% BSA</td>
</tr>
<tr>
<td>Contains</td>
<td>0.09% sodium azide</td>
</tr>
<tr>
<td>Storage Conditions</td>
<td>4° C</td>
</tr>
</tbody>
</table>

Species Reactivity

Species reactivity: Bovine, Chicken, Human, Rabbit
Published species: Mouse, Human, Chicken, Not Applicable

Tested Applications

<table>
<thead>
<tr>
<th>Dilution *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunoprecipitation (IP)</td>
</tr>
<tr>
<td>Immunocytochemistry (ICC/IF)</td>
</tr>
</tbody>
</table>

Published Applications

- Western Blot (WB): See 1 publications below
- Miscellaneous PubMed (Misc): See 1 publications below
- Immunohistochemistry (IHC): See 10 publications below
- Immunocytochemistry (ICC/IF): See 1 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Species/Target Information

MA5-12653 targets Progesterone Receptor in IF and IP applications and shows reactivity with Bovine, Chicken, Human, and Rabbit samples. The MA5-12653 immunogen is partially purified PgR from a human endometrial carcinoma (EnCa 101) grown in athymic mice.

Background/Target Information

The progesterone receptor (PR) is a member of the steroid family of nuclear receptors. The PR mediates the physiological effects of progesterone, which plays a central role in reproductive events associated with the establishment and maintenance of pregnancy. PR is found as a 94 kDa protein (Form A) or a 120 kDa protein (Form B) due to the use of alternative translation initiation sites. PR-B is the transcriptionally active form and is responsible for activating genes for the maintenance of the endometrium, maintenance of pregnancy, and inhibition of ovulation. PR-A is identical to PR-B except for a 165 amino acid deletion at the N-terminus. This deletion exposes a 140 amino acid inhibitory domain (ID) that acts as a repressor of steroid hormone transcriptional activity.

In its inactive state, PgR forms a multiprotein complex which includes heat shock proteins and immunophins. Upon binding of progesterone hormone to its receptor, there is a conformational change that allows dimerization and binding of the receptor to progesterone response elements (PRE) sequences, resulting in activated transcription. A Null mutation in the PGR gene leads to pleiotropic reproductive abnormalities.

Protagesterone Receptor Antibody (MA5-12653) in WB
Western blot of Protagesterone Receptor using Protagesterone Receptor Monoclonal Antibody (Product # MA5-12653) on T47D Cells.

Protagesterone Receptor Antibody (MA5-12653) in IP
Immunoprecipitation of Protagesterone Receptor using Protagesterone Receptor Monoclonal Antibody (Product # MA5-12653) on Native Human T47D Cells.
### 1 Western Blot References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / 2 µg/mL</strong></td>
<td>MA5-12653 was used in western blot to study antiprogestin resistance and the progesterone receptor isoform ratio in acquired resistant mammary carcinomas.</td>
</tr>
</tbody>
</table>

*Breast cancer research and treatment (Aug 2009; 116: 449)*

**“Reversal of antiprogestin resistance and progesterone receptor isoform ratio in acquired resistant mammary carcinomas.”**

Author(s): Wargon V, Helguero L A, Bolado J, Rojas P, Novaro V, Molinolo A, Lanari C

PubMed Article URL: [http://dx.doi.org/10.1007/s10549-008-0150-y](http://dx.doi.org/10.1007/s10549-008-0150-y)

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### 1 Miscellaneous PubMed References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chicken / 4 µg/mL</strong></td>
<td>MA5-12653 was used in immunohistochemistry - paraffin section to examine the expression of progesterone receptor isoforms and estrogen receptor alpha in chickens.</td>
</tr>
</tbody>
</table>

*Acta histochemica (Oct 2015; 117: 681)*

**“Immunohistochemical localization of progesterone receptor isoforms and estrogen receptor alpha in the chicken oviduct magnum during development.”**

Author(s): González-Morán MG

PubMed Article URL: [http://dx.doi.org/10.1016/j.acthis.2015.10.003](http://dx.doi.org/10.1016/j.acthis.2015.10.003)

### 10 Immunohistochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chicken / Not Cited</strong></td>
<td>MA5-12653 was used in immunohistochemistry to study the effect of embryonic gonadotropin treatment on progesterone receptor isoforms in newly-hatched chick ovary.</td>
</tr>
</tbody>
</table>

*Comparative biochemistry and physiology. Part A, Molecular & integrative physiology (Jun 2002; 132: 519)*

**“Progesterone receptor isoforms in ovary of newly-hatched chick after gonadotropin treatment during embryonic development.”**

Author(s): González-Morán G, García-Izquierdo J, Camacho-Arroyo I

PubMed Article URL: [http://dx.doi.org/10.1016/s1095-6433(02)00096-x](http://dx.doi.org/10.1016/s1095-6433(02)00096-x)

| **Human / Not Cited** | MA5-12653 was used in immunohistochemistry to investigate the role of estrogen and progesterone receptors in the metastatic endometrial carcinoma. |

*Gynecologic oncology (Aug 2007; 106: 325)*

**“Relationship of estrogen and progesterone receptors to clinical outcome in metastatic endometrial carcinoma: a Gynecologic Oncology Group Study.”**

Author(s): Singh M, Zaino RJ, Filiaci VJ, Leslie KK

PubMed Article URL: [http://dx.doi.org/10.1016/j.ygyno.2007.03.042](http://dx.doi.org/10.1016/j.ygyno.2007.03.042)

| **Chicken / Not Cited** | MA5-12653 was used in immunohistochemistry to study the effect of gonadotropins on progesterone receptor isoforms in the oviduct magnum of newly-hatched chicks. |

*Life sciences (Jul 2003; 73: 871)*

**“Changes in the presence of progesterone receptor isoforms in the oviduct magnum of newly-hatched chicks after gonadotropins treatment.”**

Author(s): González-Morán G, Camacho-Arroyo I

PubMed Article URL: [http://dx.doi.org/10.1016/s0024-3205(03)00353-9](http://dx.doi.org/10.1016/s0024-3205(03)00353-9)

| **Human / 4 µg/mL** | MA5-12653 was used in immunohistochemistry to study the expression of different progesterone receptor isoforms in human astrocytomas. |

*Brain research bulletin (Sep 2001; 56: 43)*

**“Progesterone receptor isoforms expression pattern in human astrocytomas.”**

Author(s): González-Agüero G, Ondarza R, Gamboa-Dominguez A, Cerbón MA, Camacho-Arroyo I

PubMed Article URL: [http://dx.doi.org/10.1016/s0361-9230(01)00590-1](http://dx.doi.org/10.1016/s0361-9230(01)00590-1)

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MA5-12653 was used in immunohistochemistry and western blot to study the role of hypermethylation of the progesterone receptor A in constitutive antiprogestin-resistant mouse mammary carcinomas

Mouse / 1:200

Breast cancer research and treatment (Apr 2011; 126: 319)

"Hypermethylation of the progesterone receptor A in constitutive antiprogestin-resistant mouse mammary carcinomas."

Author(s): Wargon V, Fernandez SV, Gein M, Giulianelli S, Russo J, Lanari C
PubMed Article URL: http://dx.doi.org/10.1007/s10549-010-0909-x

MA5-12653 was used in immunohistochemistry, immunoprecipitation, and western blot to study the subcellular localization of progesterone receptor isoforms A and B in endometrial cancer

Human / 1:25

Gynecologic oncology (Jan 2005; 96: 32)

"Progesterone receptor isoform identification and subcellular localization in endometrial cancer."

Author(s): Leslie KK, Stein MP, Kumar NS, Dai D, Stephens J, Wandinger-Ness A, Glueck DH
PubMed Article URL: http://dx.doi.org/10.1016/j.ygyno.2004.09.057

MA5-12653 was used in immunohistochemistry to study the effect of inflammatory status on aromatase and steroid receptor expression in endometriosis

Human / 1:200

Endocrinology (Mar 2008; 149: 1190)

"Inflammatory status influences aromatase and steroid receptor expression in endometriosis."

Author(s): Bukulmez O, Hardy DB, Carr BR, Word RA, Mendelson CR
PubMed Article URL: http://dx.doi.org/10.1210/en.2007-0665

MA5-12653 was used in immunohistochemistry to study the mechanism by which Tip30 loss leads to development of mammary tumors

Mouse / 1:50

Cancer research (Dec 2010; 70: 10224)

"Tip30 deletion in MMTV-Neu mice leads to enhanced EGFR signaling and development of estrogen receptor-positive and progesterone receptor-negative mammary tumors."

Author(s): Zhang C, Mori M, Gao S, Li A, Hoshino I, Aupperlee MD, Haslam SZ, Xiao H
PubMed Article URL: http://dx.doi.org/10.1158/0008-5472.CAN-10-3057

MA5-12653 was used in immunohistochemistry to study the effect of tamoxifen on endometrial histology and gene expression

Human / 1:40

Applied immunohistochemistry & molecular morphology : AIMM (Sep 2007; 15: 284)

"Effect of tamoxifen on endometrial histology, hormone receptors, and cervical cytology: a prospective study with follow-up."

Author(s): Leslie KK, Walter SA, Torkko K, Stephens JK, Thompson C, Singh M
PubMed Article URL: http://dx.doi.org/10.1097/01.pai.0000213147.54901.12

MA5-12653 was used in immunohistochemistry to study changes in the progesterone receptor isoform (A/B) ratio of human fetal membranes during term parturition

Human / 1:20

American journal of obstetrics and gynecology (Sep 2005; 193: 1156)

"Progesterone receptor isoform (A/B) ratio of human fetal membranes increases during term parturition."

Author(s): Oh SY, Kim CJ, Park I, Romero R, Sohn YK, Moon KC, Yoon BH
PubMed Article URL: http://dx.doi.org/10.1016/j.ajog.2005.05.071

Mouse / 1:20

MA5-12653 was used in immunohistochemistry to study the role of KLF9 in regulating estrogen receptor-alpha signaling in endometrial adenocarcinoma cells

Human / 1:500

Molecular endocrinology (Baltimore, Md.) (Dec 2007; 21: 2988)

"Kruppel-like factor 9 is a negative regulator of ligand-dependent estrogen receptor alpha signaling in Ishikawa endometrial adenocarcinoma cells."

Author(s): Velarde MC, Zeng Z, McQuown JR, Simmen FA, Simmen RC
PubMed Article URL: http://dx.doi.org/10.1210/me.2007-0242

1 Immunocytochemistry References

Species / Dilution

Summary

MA5-12653 was used in immunohistochemistry to study the role of KLF9 in regulating estrogen receptor-alpha signaling in endometrial adenocarcinoma cells

Human / 1:500

Molecular endocrinology (Baltimore, Md.) (Dec 2007; 21: 2988)

"Kruppel-like factor 9 is a negative regulator of ligand-dependent estrogen receptor alpha signaling in Ishikawa endometrial adenocarcinoma cells."

Author(s): Velarde MC, Zeng Z, McQuown JR, Simmen FA, Simmen RC
PubMed Article URL: http://dx.doi.org/10.1210/me.2007-0242