


# Anti-Glutamine Synthetase antibody ab228590

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### 製品の概要

製品名	Anti-Glutamine Synthetase antibody
製品の詳細	Rabbit polyclonal to Glutamine Synthetase
由来種	Rabbit
アプリケーション	<b>適用あり:</b> IHC-P, WB, IP, IHC-Fr, ICC/IF
種交差性	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Cow, Dog, Pig, Chimpanzee, Rhesus monkey 
免疫原	Recombinant full length protein corresponding to Human Glutamine Synthetase aa 1 to the C-terminus. Database link: <a href="#">P15104</a> <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
ポジティブ・コントロール	WB: U-87 MG, HEK-293T, SK-N-SH, IMR32, SK-N-AS whole cell extracts; Mouse eye and brain tissue extracts; Rat brain tissue extract. ICC/IF: DIV9 rat E18 primary cortical neurons. IHC-P: H441 xenograft tissue; Adult mouse retina tissue. IHC-Fr: Adult mouse cerebellum tissue. IP: IMR32 whole cell extract.
特記事項	<p>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.</p> <p>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&amp;As</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: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
精製度	Immunogen affinity purified

ポリモノ  
アイソタイプ

ポリクローナル  
IgG

#### アプリケーション

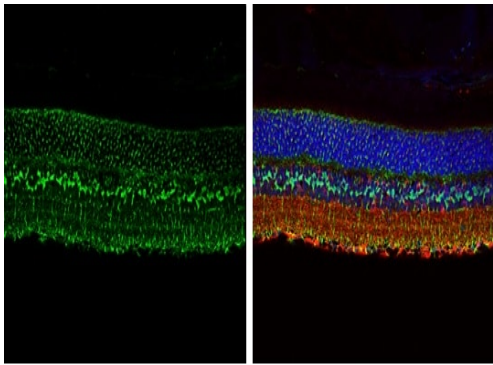
**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab228590の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/50000. Predicted molecular weight: 42 kDa.
IP		1/100 - 1/500.
IHC-Fr		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.

#### ターゲット情報

機能	This enzyme has 2 functions: it catalyzes the production of glutamine and 4-aminobutanoate (gamma-aminobutyric acid, GABA), the latter in a pyridoxal phosphate-independent manner (By similarity). Essential for proliferation of fetal skin fibroblasts.
関連疾患	Defects in GLUL are the cause of congenital systemic glutamine deficiency (CSGD) [MIM:610015]. CSGD is a rare developmental disorder with severe brain malformation resulting in multi-organ failure and neonatal death. Glutamine is largely absent from affected patients serum, urine and cerebrospinal fluid.
配列類似性	Belongs to the glutamine synthetase family.
発生段階	Expressed during early fetal stages.
細胞内局在	Cytoplasm. Mitochondrion.

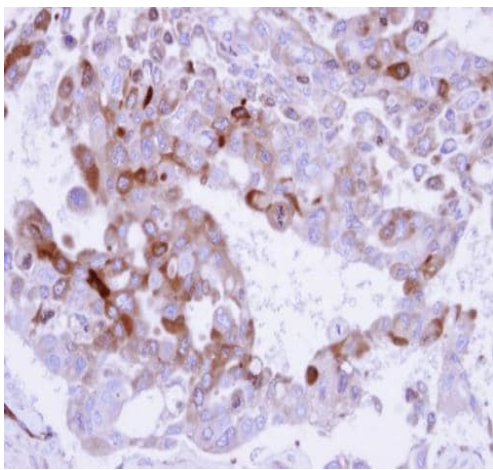
#### 画像



Paraffin-embedded adult mouse retina tissue stained for Glutamine Synthetase (green) using ab228590 at 1/250 dilution in immunohistochemical analysis.

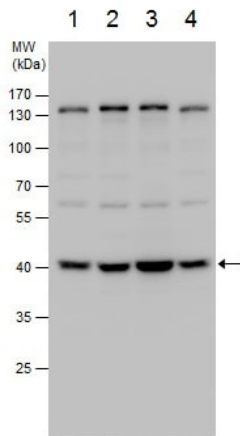
Nuclear counter stain: Fluoroshield with DAPI (blue). beta Tubulin 3/Tuj1 was stained by an anti-beta Tubulin 3/Tuj1 antibody (red) at 1/250 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutamine Synthetase antibody (ab228590)



Paraffin-embedded H441 (human) xenograft tissue stained for Glutamine Synthetase using ab228590 at 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutamine Synthetase antibody (ab228590)



Western blot - Anti-Glutamine Synthetase antibody (ab228590)

**All lanes** : Anti-Glutamine Synthetase antibody (ab228590) at 1/5000 dilution

**Lane 1** : U-87 MG (human glioblastoma-astrocytoma epithelial cell line) whole cell extract

**Lane 2** : SK-N-SH (human neuroblastoma cell line) whole cell extract

**Lane 3** : IMR32 whole cell extract

**Lane 4** : SK-N-AS whole cell extract

Lysates/proteins at 30 µg per lane.

### Secondary

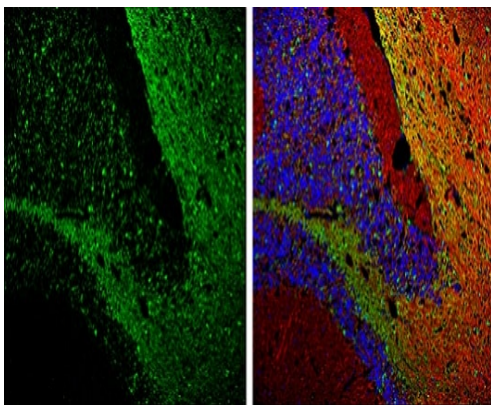
**All lanes** : HRP-conjugated anti-rabbit IgG

**Predicted band size:** 42 kDa

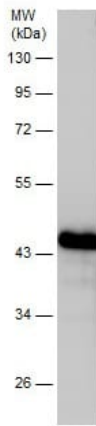
10% SDS-PAGE gel.

Frozen sections of adult mouse cerebellum tissue stained for Glutamine Synthetase (green) using ab228590 at 1/250 dilution in immunohistochemical analysis.

Nuclear counter stain: Fluoroshield with DAPI (blue). beta Tubulin 3/Tuj1 was stained by an anti-beta Tubulin 3/Tuj1 antibody (red) at 1/500 dilution.



Immunohistochemistry (Frozen sections) - Anti-Glutamine Synthetase antibody (ab228590)



Western blot - Anti-Glutamine Synthetase antibody (ab228590)

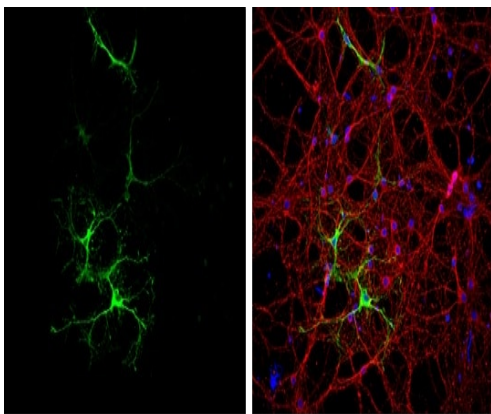
Anti-Glutamine Synthetase antibody (ab228590) at 1/20000 dilution  
+ Mouse eye tissue extract at 50  $\mu$ g

**Secondary**

HRP-conjugated anti-rabbit IgG

**Predicted band size:** 42 kDa

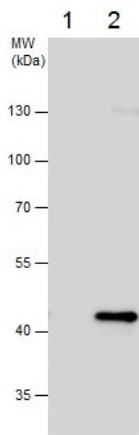
10% SDS-PAGE gel.



Immunocytochemistry/ Immunofluorescence - Anti-Glutamine Synthetase antibody (ab228590)

Paraformaldehyde-fixed DIV9 rat E18 primary cortical neurons stained for Glutamine Synthetase (green) using ab228590 at 1/500 dilution in ICF/IF.

Nuclear counter stain: Fluoroshield with DAPI (blue). beta Tubulin 3/Tuj1 was stained by an anti-beta Tubulin 3/Tuj1 antibody (red) at 1/500 dilution.

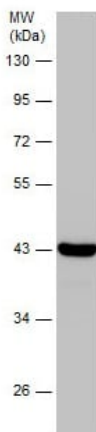


Immunoprecipitation - Anti-Glutamine Synthetase antibody (ab228590)

Glutamine Synthetase was immunoprecipitated from IMR32 whole cell extract with 5 µg of ab228590. Western blot was performed from the immunoprecipitate using ab228590. Anti-Rabbit IgG was used as a secondary reagent.

**Lane 1:** Control IgG instead of ab228590 in IMR32 whole cell extract.

**Lane 2:** ab228590 IP in IMR32 whole cell extract.



Western blot - Anti-Glutamine Synthetase antibody (ab228590)

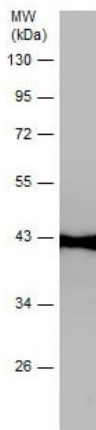
Anti-Glutamine Synthetase antibody (ab228590) at 1/50000 dilution + Mouse brain tissue extract at 50 µg

**Secondary**

HRP-conjugated anti-rabbit IgG

**Predicted band size:** 42 kDa

10% SDS-PAGE gel.



Western blot - Anti-Glutamine Synthetase antibody (ab228590)

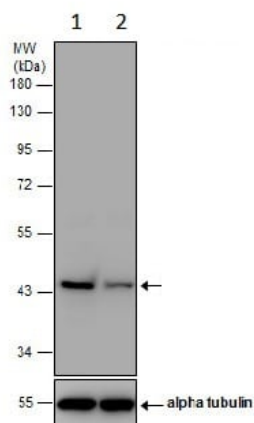
Anti-Glutamine Synthetase antibody (ab228590) at 1/50000 dilution + Rat brain tissue extract at 50 µg

**Secondary**

HRP-conjugated anti-rabbit IgG

**Predicted band size:** 42 kDa

10% SDS-PAGE gel.



Western blot - Anti-Glutamine Synthetase antibody (ab228590)

**All lanes :** Anti-Glutamine Synthetase antibody (ab228590) at 1/1000 dilution

**Lane 1 :** Non-transfected HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract.

**Lane 2 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with Glutamine Synthetase shRNA, whole cell extract.

Lysates/proteins at 30 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG

**Predicted band size:** 42 kDa

10% SDS-PAGE gel.

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