## **Product Datasheet**

### AG-2/AGR2 Antibody - BSA Free NBP1-05936

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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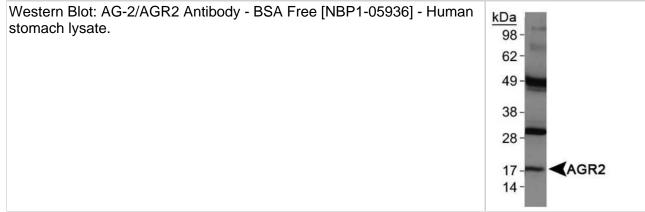
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#### NBP1-05936

AG-2/AGR2 Antibody - BSA Free

-	
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol
Target Molecular Weight	20 kDa
Product Description	
Host	Rabbit
Gene ID	10551
Gene Symbol	AGR2
Species	Human, Mouse, Bovine
Immunogen	Synthetic peptide made to an N-terminal portion of mouse AGR2 (within residues 1-50). [Swiss-Prot# O88312]
Product Application Details	5
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1.0 ug/ml, Immunohistochemistry 1:100-1:300, Immunocytochemistry/ Immunofluorescence 1:100, Immunohistochemistry- Paraffin 1:100-1:300
Application Notes	This AGR2 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry paraffin embedded sections, and Western blot analysis where a band can be seen at ~19.9 kDa. In ICC/IF cytoplasmic staining is observed. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.
Images	
Western Blot: AG-2/AGR2 Ar	otibody - BSA Free [NBP1-05936] - Human



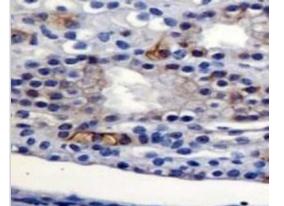
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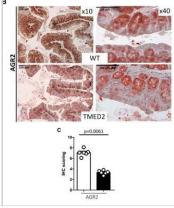
Immunocytochemistry/Immunofluorescence: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] - AGR2 antibody was tested in MCF7 cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Immunohistochemistry: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] Е CD163 AGR2 TMED2 - Representative immunohistological analysis of CD163 (scavenger receptor present in macrophages), AGR2, and TMED2 in non-inflamed Control colonic biopsies from healthy controls and patients with active or quiescent CD. Image collected and cropped by CiteAb from the following publication Quiescent (https://onlinelibrary.wiley.com/doi/10.15252/emmm.201810120) licensed under a CC-BY license. 5 Active Western Blot: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] - Western F TCL 1.5 AGR2 expression (normalized to loading control) blot analysis (left panel) and quantification (right panel) of AGR2 (n=4) AGR2 kDa p=0.003 intracellular expression upon TMED2 overexpression. Data are TMED2 1.0 representative of four independent experiments. Tubulin (TUB) was used 55 αTUB as a loading control. The graph represents average signal normalized on reporter protein expression +/- SD. The Mann-Whitney statistical test 21.5 AGR2 0.5 was used. Image collected and cropped by CiteAb from the following TMED2 publication (//pubmed.ncbi.nlm.nih.gov/31040128/) licensed under a CC-0. BY license. AGR2 TMED2 Immunohistochemistry: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] - Detection of AGR2 in mouse prostate.



Immunohistochemistry: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] - Detection of AGR2 in mouse kidney.



Immunohistochemistry: AG-2/AGR2 Antibody - BSA Free [NBP1-05936] - B. Analysis of AGR2 expression in the proximal colon of WT and TMED2 hypomorph mice. C.Semi-quantitative analysis of AGR2 expression in the proximal colon of WT (blank bars) and TMED2 hypomorph mice (black bars) (n = 6). The graph represents average IHC signal +/- SD. For statistical analyses, the Mann-Whitney test was used. Image collected and cropped by CiteAb from the following publication (https://onlinelibrary.wiley.com/doi/10.15252/emmm.201810120) licensed under a CC-BY license.



#### **Publications**

Maurel M, Obacz J, Avril T et al. Control of anterior GRadient 2 (AGR2) dimerization links endoplasmic reticulum proteostasis to inflammation EMBO Mol Med 2019-04-30 [PMID: 31040128] (IHC-P, Human)



#### **Procedures**

#### Immunohistochemistry Protocol specific for AGR2 Antibody (NBP1-05936)

AG-2/AGR2 Antibody: Antigen Unmasking

Bring slides to a boil in 10 mM sodium citrate buffer pH 6.0 then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench top for 30 minutes.

Staining

1. Wash sections in dH2O three times for 5 minutes each.

2. Wash section in wash buffer (1X PBS/0.1% Tween-20 (1X PBST)) for 5 minutes.

3. Block each section with 100-400 ul blocking solution (1X PBST, 5% goat serum) for 1 hour at room temperature.

4. Remove blocking solution and add 100-400 ul primary antibody diluted in 1X PBST, 5% goat serum to each section. Incubate overnight at 4C.

5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.

6. Add 100-400 ul biotinylated secondary antibody, diluted in 1X PBST, 5% goat serum. Incubate 30 minutes at room temperature.

7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.

8. Add 100-400 ul Striptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.

9. Wash sections three times in wash buffer for 5 minutes each.

10. Add 100-400 ul DAB substrate to each section and monitor staining closely.

11. As soon as the sections develop, immerse slides in dH2O.

12. Counterstain sections in hematoxylin.

13. Wash sections in dH2O two times for 5 minutes each.

14. Dehydrate sections.

15. Mount coverslips.

#### Immunocytochemistry/Immunofluorescence Protocol for AGR2 antibody (NBP1-05936)

AG-2/AGR2 Antibody:

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.

2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.

3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.

4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.

5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.

6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.

7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.

8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.

9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

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#### Products Related to NBP1-05936

NBP1-05936PEP	AG-2/AGR2 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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