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# **DATASHEET**

Anti-GFP antibody ValidAb<sup>TM</sup>

#### **Product overview**

Name Anti-GFP antibody ValidAb<sup>TM</sup>

Cat NoHB8912HostRabbitClonalityPolyclonalTargetGFP

**Customer comments** The GFP antibody shows good specificity and signal/noise (S/N). At equivalent dilution, the signal is

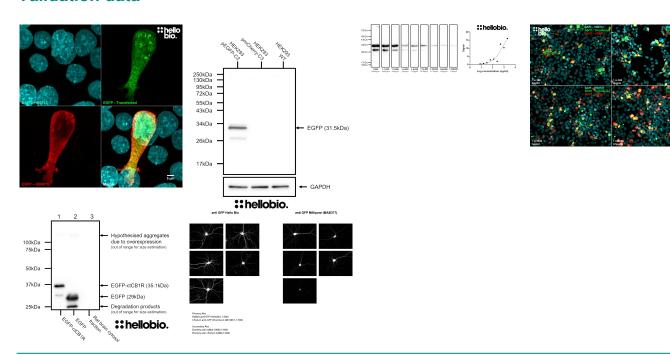
brighter with this antibody than with our usual antibodies - the Poncer lab, Institute Du Fer À Moulin -

Inserm.

Description Antibody to GFP - green coloured fluorescent protein widely used as a tag in molecular biology. Part of

the ValidAb™ range of highly validated, data-rich antibodies.

# Validation data



# **Product information**

**Immunogen** Full length EGFP protein

**Purification** Affinity purification using immunogen as ligand

Concentration 1mg/ml

Formulation Lyophilised. When reconstituted contains PBS with 15mM sodium azide and 1% recombinant BSA

Predicted species reactivity Species Independent Species Independent

# **Tested applications**

**Applications** ICC. WB

Western blot optimal

concentration

transfected HEK293 cells. ICC optimal concentration Dependent upon sample GFP expression. We used as low as 500ng/ml (1:2,000 dilution) in pEGFP-

C2 transfected HEK293 cells.

Positive control Any tissue or cell sample that has been engineered to express GFP.

**Negative control** Any wild type tissue or cellular sample. Open data link Please follow this this link to OSF

# **Target information**

Other names EGFP, green fluorescent protein, EYFP

**UniProt ID** P42212 Gene name **GFP** 

NCBI full gene name green fluorescent protein

Amino acids 238 (27kDa) Isoforms None

**Expression** Exogenously expressed only. Not expressed natively in mammalian cells.

Subcellular expression GFP is generally expressed cytosolically in basic constructs however expression can be directed to

any cellular compartment through GFP-tagged proteins that naturally express in only certain

Dependent upon sample GFP expression. We used 100ng/ml (1:10,000 dilution) in pEGFP-C2

compartments.

**Target function** None. Used widely in research to visualise specific proteins through GFP-tagged recombinant

constructs.

**Processing** Post translational modifications

Homology (compared to

human)

Similar proteins

NΑ

NA

NA

EGFP (enhanced GFP, 26.9kDa) and YFP (yellow fluorescent protein, 26.4kDa) are both extremely

similar with HB8912 recognising these.

# Storage & Handling

Storage instructions Reconstitution advice -20°C then use reconstitution advice Upon receipt store at either -20°C or -80°C.

For 100µg packs either:

- Reconstitute with 100µl dH<sub>2</sub>O and store at 4°C
- Reconstitute with 50µl dH<sub>2</sub>O and 50µl glycerol then store at -20°C
- Reconstitute with 100µl dH<sub>2</sub>O, aliquot then snap freeze and store at -80°C

For 25µg packs either:

- Reconstitute with 25µl dH2O and store at 4°C
- Reconstitute with 12.5µl dH<sub>2</sub>O and 12.5µl glycerol then store at -20°C
- Reconstitute with 25µl dH<sub>2</sub>O, aliquot then snap freeze and store at -80°C

For more information read our guide on the best care for your product. Take care when opening as the precipitate is extremely light and can easily be lost if disturbed. When reconstituting make sure that the antibody is thoroughly dissolved by pipetting up and down before giving the antibody a brief spin at

10,000g to make sure that all material is recovered and at the bottom of the tube.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

# References

**Important** 

#### Green fluorescent protein: A perspective

Remington SJ (2011) Protein Science 20(9)

**PubMedID** 21714025

#### The green fluorescent protein

Tsien RY (1998) Annu Rev Biochem 67 **PubMedID** 9759496

#### Fluorescent proteins as biomarkers and biosensors: throwing color lights on molecular and cellular processes

Stepaneko O et al (2008) Curr Protein Pept Sci. 9(4)

**PubMedID** 18691124

#### Extraction, purification and properties of aequorin, a bioluminescent protein from the luminous hydromedusan, Aequorea

Shimomura O, Johnson F and Saiga Y (1962) J Cell Comp Physiol 59

**PubMedID** 13911999

# Crystal structure of the Aequorea victoria green fluorescent protein

Ormö M et al (1996) Science 273(5280) **PubMedID**870307

# A guide to choosing fluorescent proteins

Shaner N, Steinbach P and Tsien R (2005) Nature Methods 2(12)

**PubMedID** 16299475