Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

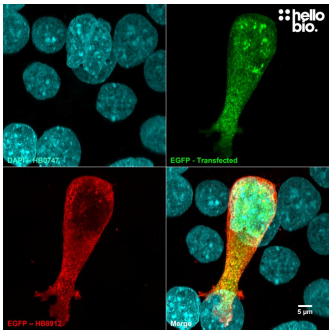
DATASHEET

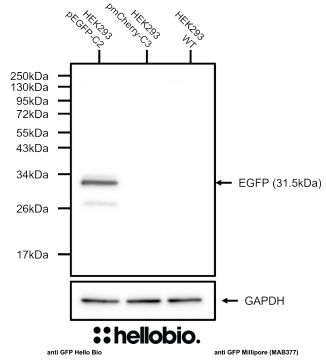
Anti-GFP antibody ValidAb™

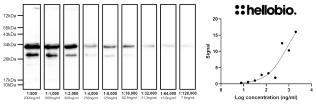
Product overview

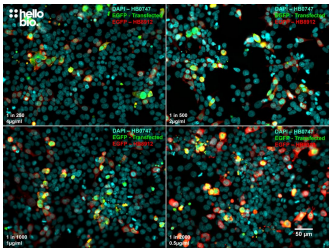
Name	Anti-GFP antibody ValidAb™
Cat No	HB8912
Host	Rabbit
Clonality	Polyclonal
Target	GFP
Description	Antibody to GFP - green coloured fluorescent protein widely used as a tag in molecular biology. Part of the ValidAb™ range of highly validated, data-rich antibodies.
Customer comments	*The GFP antibody 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.*

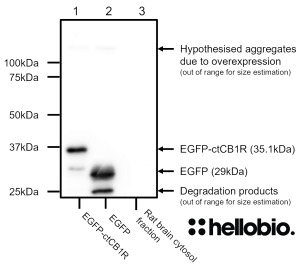
Validation data

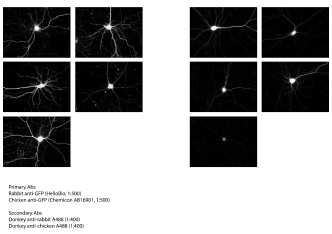












Product information

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
Tested species reactivity	Species Independent

Tested applications

Applications	ICC, WB
Western blot optimal concentration	Dependent upon sample GFP expression. We used 100ng/ml (1:10,000 dilution) in pEGFP-C2 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 compartments.
Processing	NA
Post translational modifications	NA
Homology (compared to human)	NA
Similar proteins	EGFP (enhanced GFP, 26.9kDa) and YFP (yellow fluorescent protein, 26.4kDa) are both extremely similar with HB8912 recognising these.

Storage & Handling

Storage instructions	-20°C then use reconstitution advice
Reconstitution advice	We recommend reconstituting with either: • dH_2O and storing at 4°C • 50:50 ratio of dH_2O to glycerol and storing at -20°C • dH_2O then aliquot and store at -80°C 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. For more information please see our detailed guide on storing and using your antibody
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

References

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 8703075

A guide to choosing fluorescent proteins

Shaner N, Steinbach P and Tsien R (2005) Nature Methods 2(12)
PubMedID 16299475