

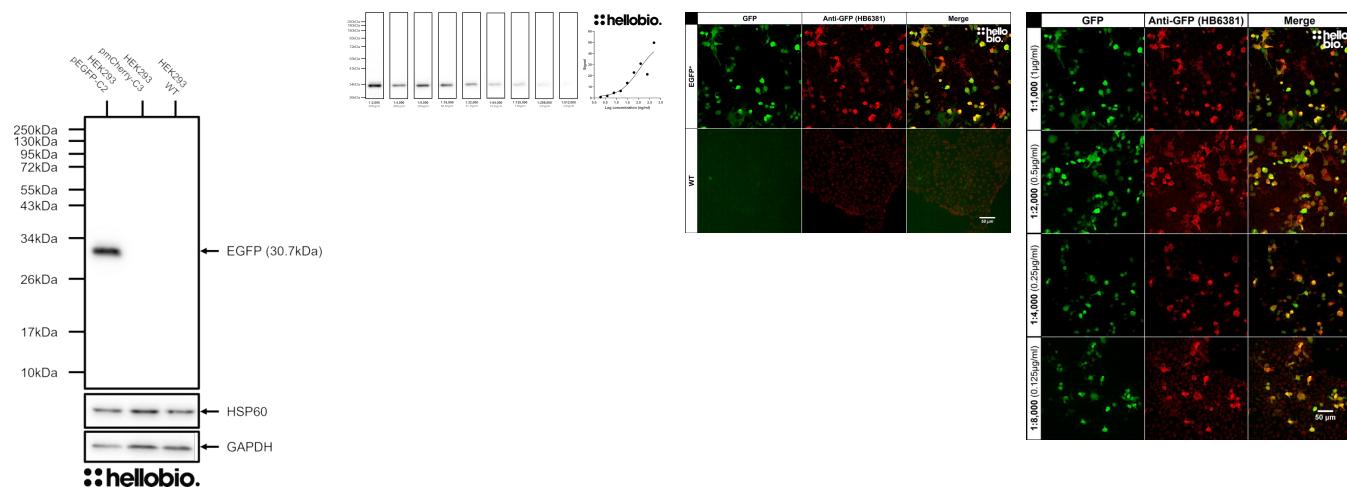
DATASHEET

Anti-GFP antibody ValidAb™

Product overview

| | |
|-------------|---|
| Name | Anti-GFP antibody ValidAb™ |
| Cat No | HB6381 |
| Host | Mouse |
| Clonality | Monoclonal |
| Target | GFP |
| Description | Monoclonal antibody (IgM) 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

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|------------------------------|--|
| Immunogen | Recombinant prot-r-AcGFP expressed in and purified from E. coli |
| Epitope | Localised to the N-terminus of both GFP (amino acids 1-17) and recombinant prot-r-AcGFP (amino acids 36-53) to the sequence MVSKGAELFTGIVPILIE |
| Clone number | 1F1 |
| Isotype | IgM |
| Purification | Protein L affinity chromatography |
| Concentration | 1 mg/ml |
| Formulation | 50% PBS, 50% glycerol + 5mM sodium azide |
| Predicted species reactivity | Species Independent |
| Tested species reactivity | Species Independent |

Tested applications

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| Applications | ICC, WB |
| Western blot optimal concentration | Dependent upon sample GFP expression. We used 125ng/ml (1:8,000 dilution) in pEGFP-C2 transfected HEK293 cells. |
| ICC optimal concentration | Dependent upon sample GFP expression. We used 500ng/ml (1:2,000 dilution) in pEGFP-C2 transfected HEK293T 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

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|---|--|
| 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. |
| Target function | None. Used widely in research to visualise specific proteins through GFP-tagged recombinant constructs. |
| 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. |
| Epitope homology (between species) | NA |
| Epitope homology (other proteins) | In a BLAST search considering potential cross-reactivities with human, rat and mouse proteins the following proteins were identified: <ul style="list-style-type: none"> • Bromodomain-containing protein 3 (Human) - 100% identity across 38% of the query • NADH-ubiquinone oxidoreductase chain 1 (Human) - 100% identity across 33% of the query • Tudor domain containing protein 6 (Human) - 80% identity across 50% of the query • Sodium/hydrogen exchanger 11 (Human) - 80% identity across 55% of the query. |

Other names

EGFP, green fluorescent protein, EYFP

However none of these cross-reactivites were observed experimentally implying that the short query covers were insufficient to produce immunoreactivity to non-GFP epitopes.

Storage & Handling

Storage instructions

-20 °C

Important

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

References

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PubMedID

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