

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

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.

However none of these cross-reactivities 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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Crystal structure of the Aequorea victoria green fluorescent protein.

Ormö M et al (1996) Science (New York, N.Y.) 273

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