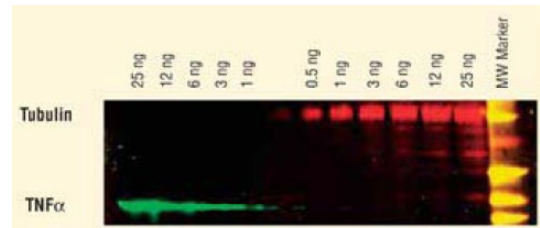


Polyclonal Antibody to DYKDDDDK Epitope Tag - DyLight649

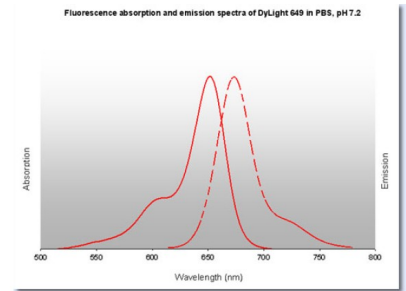
Alternate names:	D-tag, ECS Epitope Tag, ECS-tag, FLAG Epitope Tag, FLAG-tag
Catalog No.:	R1180DL7
Quantity:	0.1 mg
Concentration:	1.0 mg/ml (by UV absorbance at 280 nm)
Background:	Epitope tags are short peptide sequences that are easily recognized by tag-specific antibodies. Due to their small size, epitope tags do not affect the tagged proteins biochemical properties. Most often sequences encoding the epitope tag are included with target DNA at the time of cloning to produce fusion proteins containing the epitope tag sequence. This allows anti-epitope tag antibodies to serve as universal detection reagents for any tag containing protein produced by recombinant means. This means that anti-epitope tag antibodies are a useful alternative to generating specific antibodies to identify, immunoprecipitate or immunoaffinity purify a recombinant protein. The anti-epitope tag antibody is usually functional in a variety of antibody-dependent experimental procedures. Expression vectors producing epitope tag fusion proteins are available for a variety of host expression systems including bacteria, yeast, insect and mammalian cells.
Host:	Rabbit
Immunogen:	This antibody was purified from whole rabbit serum prepared by repeated immunizations with the Enterokinase Cleavage Site (ECS) peptide DYKDDDDK (Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys) conjugated to KLH using maleimide. Residues of glycine and cysteine were added to the carboxy terminal end to facilitate coupling. This antibody reacts with FLAG(TM) conjugated proteins.
Format:	State: Lyophilized purified Ig Purification: Affinity chromatography Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 10 mg/ml BSA as stabilizer and 0.01% (w/v) Sodium Azide as preservative Label: DyLight649 – IRDye(TM)649 (MW 1,008.02) <i>Absorption / Emission:</i> 646 nm / 674 nm <i>Molar Ratio:</i> 1,8 IRDye(TM)649 per mole of Rabbit IgG Reconstitution: Restore with 0.1 ml of deionized water (or equivalent).
Applications:	Western Blot: >1/20,000. ELISA >1/10,000. Immunofluorescence: >1/5,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** This antibody is directed against the FLAG(TM) motif and is useful in determining its presence in various assays.
- Storage:** Prior to reconstitution store at 2-8°C. Following reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
- General Readings:**
1. Chubet RG, Brizzard BL. Vectors for expression and secretion of FLAG epitope-tagged proteins in mammalian cells. *Biotechniques*. 1996 Jan;20(1):136-41. PubMed PMID: 8770418.
 2. Slootstra JW, Kuperus D, Plückthun A, Meloen RH. Identification of new tag sequences with differential and selective recognition properties for the anti-FLAG monoclonal antibodies M1, M2 and M5. *Mol Divers*. 1997;2(3):156-64. PubMed PMID: 9238646.
 3. Robeva AS, Woodard R, Luthin DR, Taylor HE, Linden J. Double tagging recombinant A1- and A2A-adenosine receptors with hexahistidine and the FLAG epitope. Development of an efficient generic protein purification procedure. *Biochem Pharmacol*. 1996 Feb 23;51(4):545-55. PubMed PMID: 8619901.
 4. Fulton JE, Thacker EL, Bacon LD, Hunt HD. Functional analysis of avian class I (BFIV) glycoproteins by epitope tagging and mutagenesis in vitro. *Eur J Immunol*. 1995 Jul;25(7):2069-76. PubMed PMID: 7621880.






Pictures: DyLight(TM) dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight(TM)549 conjugate. Anti-TNFalpha was detected using a DyLight(TM)649 conjugate. The image was captured using the Typhoon(TM) 9410 Imaging System.



DyLight™ 649 Fluorescence Spectra:



Properties of DyLight™ Fluorescent Dyes:

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ϵ (M ⁻¹ cm ⁻¹)	Similar Dyes
Green		488	493/518	70,000	Alexa™ 488, Cy2®, FITC
Yellow		549	550/568	150,000	Alexa™ 546, Alexa 555, Cy3®, TRITC
Red		649	646/674	250,000	Alexa™ 647, Cy5®
Near Infrared		680	682/715	140,000	Alexa™ 680, Cy5.5®, IRDye™ 700
Infrared		800	770/794	270,000	IRDye™ 800