

## Polyclonal Antibody to HA Epitope Tag (YPYDVPDYA) - DyLight649

<b>Alternate names:</b>	HA Tag, HA-Tag, Hemagglutinin Tag
<b>Catalog No.:</b>	AP09230DL7-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml (by UV absorbance at 280 nm)
<b>Background:</b>	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 protein's 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.
<b>Host / Isotype:</b>	Rabbit / IgG
<b>Immunogen:</b>	Synthetic peptide corresponding aa 114-122 of Hemagglutinin Influenza conjugated to KLH using maleimide <b>AA Sequence:</b> Y-P-Y-D-V-P-D-Y-A-G
<b>Format:</b>	<b>State:</b> Lyophilized purified Ig fraction. <b>Purification:</b> Affinity Chromatography. <b>Buffer System:</b> 0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2 containing 10 mg/ml BSA (IgG and Protease free) and 0.01% (w/v) Sodium Azide <b>Label:</b> DyLight649 – DyLight™ 649 (MW 1,008) <b>Conjugation Chemistry:</b> N-hydroxysuccinimide (NHS) ester <i>Absorption / Emission:</i> 646 nm / 674 nm <i>Molar Ratio:</i> 1.8 DyLight™ 649 per mole of Rabbit IgG <b>Reconstitution:</b> Rehydrate with 0.1 ml of deionized water (or equivalent).
<b>Applications:</b>	This product is designed for Immunofluorescence Microscopy, Fluorescence based plate assays (FLISA) and fluorescent Western blotting. This product is also suitable for multiplex analysis, including multicolor imaging, utilizing various commercial platforms. <u><b>Recommended Dilutions:</b></u> FLISA: > 1/20,000. Western blot: 1/10,000-1/25,000. Immunofluorescent Microscopy: > 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 HA epitope tag and is useful in determining its presence in over expressed proteins in various assays. The antibody recognizes the HA epitope tag (Tyr-Pro-Tyr-Asp-Val-Pro-Asp-Tyr-Ala-Gly) fused to either the amino- or carboxy-termini of targeted proteins in transfected or transformed cells.

**Add. Information:**

Instrument compatibility: The emission spectra for this DyLight™ conjugate match the principal output wavelengths of most common fluorescence instrumentation.

**Storage:**

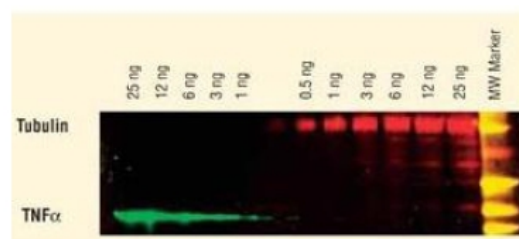
Store vial at 2-8°C prior to restoration. Following restoration product can be stored undiluted at 2-8°C for one month or (in aliquots) at -20°C or below. Avoid repeated freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Shelf life: One year from despatch.

**General Readings:**

1. Modified from Thermo Fisher Scientific Inc, Rockford, IL (Conjugation).

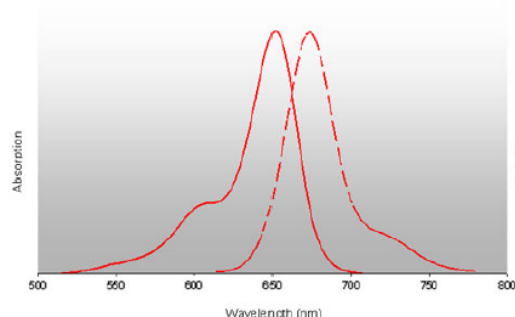
**Pictures:**

**Figure 1.** DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™549 conjugate. Anti-TNFα was detected using a DyLight™649 conjugate. The image was captured using the Typhoon™ 9410 Imaging System.



DyLight™ 649 Fluorescence Spectra.

Fluorescence absorption and emission spectra of DyLight 649 in PBS, pH 7.2



**Properties of DyLight™ Fluorescent Dyes**

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