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Datasheet for 600-445-384

HA Epitope Tag Antibody Dylight™ 800 Conjugated

Overview

Description:	Anti-HA Epitope Tag (RABBIT) Antibody DyLight™ 800 Conjugated - 600-445-384
Item No.:	600-445-384
Size:	100 µg
Applications:	IF, WB
Reactivity:	HA-Tag
Host Species:	Rabbit

Product Details

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 biochemical properties of the tagged protein. Most often, sequences encoding the epitope tag are included with the 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. HA tag is frequently incorporated into recombinant proteins for a variety of purposes. An anti-HA antibody can then be used to detect the protein when doing studies with transfected cells.
Synonyms:	Rabbit Anti-HA Epitope Tag Antibody DyLight 800™ Conjugated, Rabbit Anti HA Epitope Tag Antibody DyLight 800™ Conjugated
Host Species:	Rabbit
Conjugate:	DyLight™ 800
Clonality:	Polyclonal
Format:	IgG
F/P Ratio:	2.0

Target Details

Reactivity:	HA-Tag

Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding aa 114-122 (Y-P-Y-D-V-P-D-Y-A-G) of hemagglutinin influenza conjugated to KLH using maleimide.
Purity/Specificity:	This affinity purified 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.

Application Details

Suggested Applications:	IF, WB (Based on references)
Application Note:	Anti-HA Epitope Tag DyLight 800 Antibody 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. The emission spectra for this DyLight™ conjugate match the principle output wavelengths of most common fluorescence instrumentation.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FLISA:	>1:20,000
IF:	>1:5,000
WB:	1:10,000 - 1:25,000

Formulation

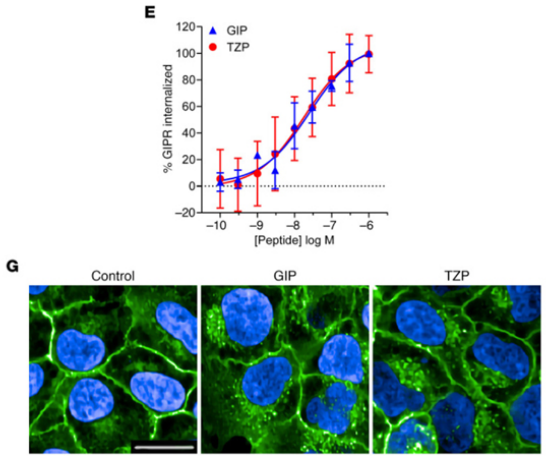
Physical State:	Lyophilized
Concentration:	0.77 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

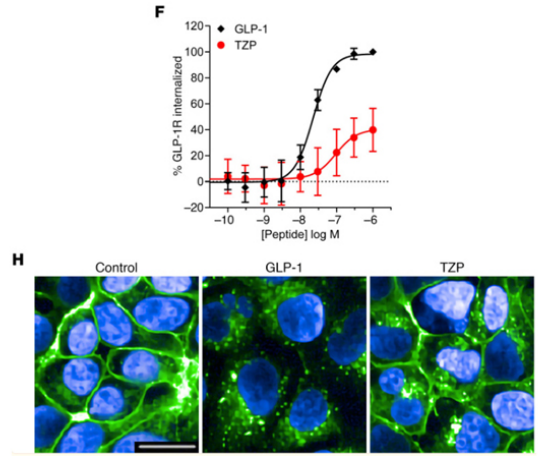
Shipping Condition:	Ambient

Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



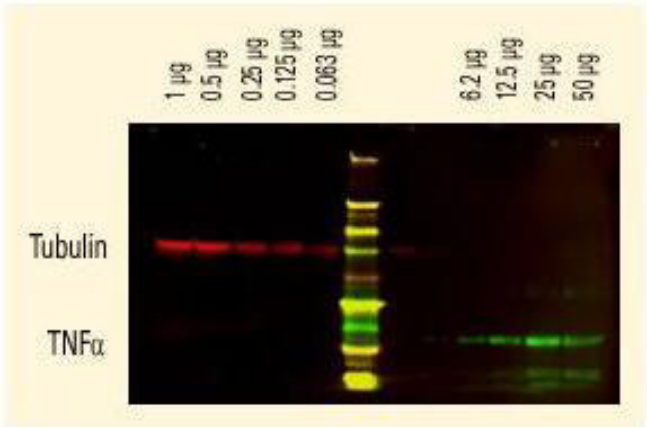
Immunofluorescence Microscopy
Immunofluorescence using Anti-HA Epitope Tag Antibody DyLight™800 Conjugated.
Tirzepatide (TZP) differentially induces internalization of the GIP and GLP-1 receptors.
(E–H) Studies using receptors containing an N-terminal HA-epitope tag and a C-terminal EGFP fusion are presented. (E) Changes in surface GIPR 60 minutes after treatment with ligand were measured by anti-HA immunofluorescence. Data are normalized to 1 µM GIP(1-42) values. For GIPR, tirzepatide induced internalization with an EC50 (SEM, n) of 18.1 nM (5.7, 4), while GIP(1-42) displayed a potency of 18.2 nM (9.7, 4). (G) Representative confocal images of HA-GIPR-EGFP cells detecting EGFP fluorescence following treatment with vehicle, 100 nM GIP(1-42), or 100 nM tirzepatide. Figure 2. PMID: 32730231.



Immunofluorescence Microscopy
Immunofluorescence using Anti-HA Epitope Tag Antibody DyLight™800 Conjugated.
Tirzepatide (TZP) differentially induces internalization of the GIP and GLP-1 receptors.
(E–H) Studies using receptors containing an N-terminal HA-epitope tag and a C-terminal EGFP fusion are presented. (F) Changes in surface GLP-1R 30 minutes after treatment with ligand detected by anti-HA immunofluorescence. Data are normalized to 1 µM GLP-1(7-36) values. For GLP-1R, tirzepatide was partially efficacious at 43.6% (7.9, 3) with an EC50 of 101.9 nM (29.8, 3), while GLP-1(7-36) showed a potency of 22.2 nM (1.86, 3). (H) Representative confocal images of HA–GLP-1R–EGFP cells detecting EGFP fluorescence following treatment with vehicle, 100 nM GLP-1(7-36), or 100 nM tirzepatide. Scale bars: 20 µm. Figure 2. PMID: 32730231.

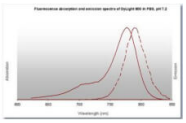
Diagram
Properties of DyLight™ Conjugates.

Emission	Color	DyLight™ Dye	Ex/Em (nm)	ε (M^{-1} cm^{-1})	Similar Dyes
Blue		**405**	**400/420**	**30,000**	**Alexa™ 405, Cascade Blue**
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



Western Blot
DyLight™ dyes can be used for two-color Western Blot detection with low background and high signal. Anti-tubulin was detected using a DyLight™ 680 conjugate. Anti-TNFa was detected using a DyLight™ 800 conjugate. The image was captured using the Odyssey® Infrared Imaging System developed by LI-COR.

Diagram



References

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- Waizenegger A et al. Mus81-Mms4 endonuclease is an Esc2-STUbL-Cullin8 mitotic substrate impacting on genome integrity. *Nat Commun.* (2020)
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