



**Alpaca-pHast (IgG) Blue450**  
SECONDARY FLUORESCENT CONJUGATE

*a tool to test antibody specificity, binding, and internalization with results in one (1) day*

**Catalog Number:** PH-20B  
**Quantity:** 100 micrograms, 250 micrograms, 1 milligram  
**Format:** PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium Phosphate; 0.01 M Sodium Phosphate; pH 7.4), no preservative. Sterile-filtered.  
**Host:** Goat

**Background:** Alpaca-pHast (IgG) Blue is one of our fastest tools for quantitative testing of your primary antibody's specificity, binding, and internalization, providing results in 1 day. Alpaca-pHast (IgG) Blue binds to your primary antibody via a secondary antibody cross-linked to a pH-dependent fluorescent reporter. This fluorescent reporter will increase intensity as the pH of its surroundings becomes more acidic, as evident when exposed to the environment inside a cell. A successful assay will provide an EC<sub>50</sub> by way of a fluorescence detecting plate reader, illuminating your lead antibody candidates.

**Specificity & Preparation:** This secondary conjugate recognizes YOUR primary antibody. Alpaca-pHast (IgG) Blue is a chemical conjugate of goat anti-alpaca IgG and a pH-dependent fluorescent reporter. The antibody used to make Alpaca-pHast (IgG) Blue is affinity-purified against the whole molecule alpaca IgG. The antibody used in this product reacts primarily with the Fc region, and is not recommended for detection of VHH antibodies. The pHast fluorescent dye has an excitation wavelength of 362 nm with an emission maxima at 452 nm.

**Usage:** Alpaca-pHast (IgG) Blue generates quantitative testing of the specific, binding, and internalization of your primary antibody, with results in 1-day. This secondary conjugate is used to evaluate the potential of a primary antibody to internalize.

**There may be lot-to-lot variation in material; working dilutions must be determined by end user. If this is a new lot, you must assess the proper working dilution before beginning a full experimental protocol.**

**Storage:** Gently spin down material 5-10 seconds in a microfuge before use. The material should be stored at 2-6°C, protected from light. You may add stabilizers such as BSA (1-10 mg/ml) or glycerol for stability and/or preservatives such as sodium azide (2 mM). Under these conditions, the material has a very stable shelf-life. Do not use a reducing agent (such as dithiothreitol, beta-mercaptoethanol or ascorbic acid) with this material. It will inactivate the conjugate.



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references.

**Selected References:**

1. Kinneer K, Meekin J, Tiberghien AC, Tai YT, Phipps S, Kiefer CM, Rebelatto MC, Dimasi N, Moriarty A, Papadopoulos KP, Sridhar S, Gregson SJ, Wick MJ, Masterson L, Anderson KC, Herbst R, Howard PW, Tice DA (2018) SLC46A3 as a potential predictive biomarker for antibody-drug conjugates bearing noncleavable linked maytansinoid and pyrrolobenzodiazepine warheads. Clin Cancer Res 24(24):6570-6582. doi: 10.1158/1078-0432.CCR-18-1300 PMID: 30131388

**Safety:**

Good laboratory technique must be employed for safe handling of this product. This requires observation of the following practices:

1. Wear appropriate laboratory attire, including lab coat, gloves and safety glasses.
2. Do not pipet by mouth, inhale, ingest or allow product to come into contact with open wounds. Wash thoroughly any part of the body which comes into contact with the product.
3. Avoid accidental autoinjection by exercising extreme care when handling in conjunction with any injection device.
4. This product is intended for research use by qualified personnel only. It is not intended for use in humans or as a diagnostic agent. Advanced Targeting Systems is not liable for any damages resulting from the misuse or handling of this product.

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