# Alkaline Phosphatase (AP)



Overview					
Product Name	Name Alkaline Phosphatase (AP)				
Size	To be used in conjunction with 100 or 200 μg Antibodies				
Molecular Weight	140kDa				
Applications*	WB   IHC   ELISA				

# **Properties**

- Broad enzymatic activity for phosphate esters of alcohols, amines, pyrophosphate and phenols
- Commonly used to dephosphorylate the 5'-termini of DNA and RNA to prevent self-ligation
- Catalyzes the conversion of:
  - o Chromogenic substrates (e.g. pNPP, naphthol AS-TR phosphate, BCIP) into coloured products
  - o Fluorogenic substrates (e.g. 4-methylumbelliferyl phosphate) into fluorescent products

HRP, Biotin, Streptavidin and the following fluorescent conjugates are available with almost all StressMarq Primary Antibodies:

Label	Excitation Max	Emission Max	Extinction Coefficient	Emission	Substitute for:
ATTO 390	390	479	24000		-
FITC	494	520	73000		Alexa Fluor® 488
ATTO 488	501	523	90000		Alexa Fluor® 488 FITC
R-PE	535	575	2000000		TRITC
ATTO 565	563	592	120000		Cy®3.5 ROXTM Alexa Fluor® 546 Alexa Fluor® 555 Alexa Fluor® 568
PE/ATTO 594	535	627	-		-
ATTO 594	601	627	80000		Alexa Fluor® 594 Texas Red®
ATTO 633	629	657	130000		Alexa Fluor® 633
APC	650	670	700000		Cy®5 Alexa Fluor® 647 Alexa Fluor® 660
PerCP	482	677	380000		-
ATTO 655	663	684	125000		Cy®5 Alexa Fluor® 647 Alexa Fluor® 660
ATTO 680	682	715	140000		Cy®5.5 Alexa Fluor® 680
ATTO 700	700	725	120000		Cy®5.5 Alexa Fluor® 700

**Please Note:** All products are for in vitro research use only and are not intended for use in humans or animals.

It is possible that the conjugate tag may bind in the paratope of the antibody, thereby limiting binding of the antibody to the antigen. Although this is unlikely, it could affect the ability of the antibody to bind to the antigen in various species and applications. As we cannot control the binding of the conjugate to the antibody, there is no way to confirm or guarantee the location of the antibody tag.

<sup>\*</sup> The applications listed are general applications for the conjugate label alone. It does not guarantee that antibody-conjugate combinations have been tested for use in the listed applications.

# Material Safety Data Sheet Alkaline Phosphatase (AP)

This product is for in vitro research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

## **Hazardous Ingredients**

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

### **Physical Data**

This product consists of freeze-dried solid.

The physical properties of this product have not been investigated thoroughly.

# Fire and Explosion Hazard and Reactivity Data

This product is not flammable. There are no anticipated hazardous decomposition products associated with this material. No specific fire fighting procedure given.

Carcinogeneic, mutagenic and teratogenic effects: Not Available.

# **Toxicological Properties**

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

#### **Preventative Measures**

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

### **Spill and Leak Procedures**

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### **First Aid Measures**

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.