



Anti-Saporin polyclonal antibody (DPAB4037)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Goat Anti-Saporin Polyclonal Antibody, HRP-ConjugatedGoat Anti-Saporin Polyclonal Antibody, HRP-Conjugated
Specificity	This antibody recognizes saporin. Saporin was used as the immunogen. The antibody was coupled to Horseradish Peroxidase (HRP) and dialyzed against PBS. The conjugated antibody is routinely tested by western blot.
Immunogen	Saporin
Isotype	IgG
Source/Host	Goat
Species Reactivity	Saponaria officinalis
Conjugate	Unconjugated
Applications	IHC-Fr, IB
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.
Size	200 µl
Preservative	None
Storage	Store the material at 4°C for one month or -20°C in undiluted aliquots for up to one year. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

BACKGROUND

Introduction

Saporin is obtained from the seeds of the Soapwort plant (*Saponaria officinalis*), a plant that grows wild in Britain and other parts of Europe. Saporin is a plant enzyme with N-glycosidase activity that depurinates a specific nucleotide in the ribosomal RNA 28S, thus irreversibly blocking protein synthesis. It belongs to the well-characterized family of ribosome-inactivating proteins (RIPs). There are two types of RIPs: type I, which are much less cytotoxic due to the lack of the B chain and type II, which are distinguished from type I RIPs by the presence of the B chain and their ability to enter cells on their own. However, type I RIPs can still be internalized by fluid-phase endocytosis. In the case of saporin, it was reported that saporin first binds to the alpha2-macroglobulin receptor on human cells and is then internalized to the cytosol. Upon internalization, the ribosomes are inactivated, resulting in cell death. HRP-labeled Anti-SAP can be used to verify binding specificity of a targeted toxin to a cell line expressing the target molecule. By first binding the targeted toxin to protein extract or plate-bound antigen, then binding HRP-labeled Anti-SAP to the targeted toxin, specificity can be confirmed through the use of competing

Keywords

RIP; Saporin
