PRODUCT INFORMATION



sPLA₂ (human Type V) Monoclonal Antibody (Clone MCL-3G1) Item No. 160510

Overview and Properties

Contents:	This vial contains 100 μg of protein A-purified antibody.
Synonyms:	gVPLA ₂ , Secretory Phospholipase A ₂ (human Group V)
Immunogen:	Recombinant human sPLA ₂ (Type V), W79A mutant ¹
Cross Reactivity:	(-) sPLA ₂ (Type IIa), cPLA ₂ , and iPLA ₂
Species Reactivity:	(+) Human; other species not tested
Uniprot No.:	P14555
Form:	Lyophilized
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, when reconstituted in 100 μ l distilled water
Clone:	MCL-3G1
Host:	Mouse
Isotype:	IgG ₁
Applications:	ELISA and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:1,000. Other applications were not tested, therefore optimal workingconcentration/ dilution should be determined empirically

Image



 $\begin{array}{l} \mbox{Lane 1: sPLA}_2 \ (Type II) \ (1 \ \mu g) \\ \mbox{Lane 2: A10 smooth muscle lysate (iPLA}_2) \ (20 \ \mu g) \\ \mbox{Lane 3: Bee venom sPLA}_2 \ (1 \ \mu g) \\ \mbox{Lane 4: Semi-pure cPLA}_2 \ (5 \ \mu g) \\ \mbox{Lane 5: SPLA}_2 \ (Type V) \ (40 \ ng) \\ \mbox{Lane 6: sPLA}_2 \ (Type V) \ (8 \ ng) \end{array}$

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user <u>must</u> review the <u>complete</u> Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Phospholipase A₂ (PLA₂) catalyzes the hydrolysis of fatty acids at the sn-2 position of glycerophospholipids. PLA_2 (Type V) is a secretory PLA_2 (sPLA₂) of approximately 14 kDa and is one of the isoforms in the growing list of the PLA₂ enzyme family.¹ This enzyme, rather than the sPLA₂ (Type II), is responsible for arachidonic acid mobilization leading to prostaglandin production in macrophages and mast cells.²⁻⁵ Consistent with this role, sPLA₂ (Type V) is associated with the golgi apparatus, nuclear envelope, and plasma membrane in murine bone marrow-derived mast cells.⁶ sPLA₂ (Type V) has been cloned from a variety of species including human, mouse, and rat.⁷⁻⁹ The enzyme is expressed in heart, lung, placenta, and spleen, as well as P388D₁ macrophages and mast cells.^{2,3,9}

References

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