

## Laminin $\gamma$ -2 Polyclonal Antibody

Cat #: ABP53110

Size: 30 $\mu$ l /100 $\mu$ l /200 $\mu$ l

### Product Information

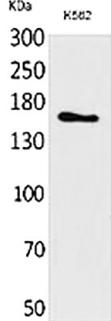
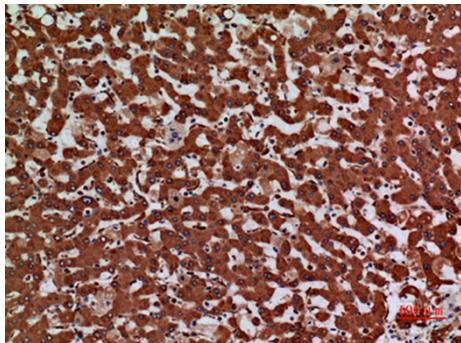
	<b>Product Name:</b> Laminin $\gamma$ -2 Polyclonal Antibody		
	<b>Applications:</b> WB, IHC-P, ELISA		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human, Rat		
<b>REF</b>	<b>Catalog Number:</b> ABP53110	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**Background:** Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Laminins, composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively), have a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain protein encoded by a distinct gene. Several isoforms of each chain have been described. Different alpha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isoforms which are designated by Arabic numerals in the order of their discovery, i. E. alpha1beta1gamma1 heterotrimer is laminin 1. The biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the gamma chain isoform laminin, gamma 2. The gamma 2 chain, formerly thought to be a truncated version of beta chain (B2t), is highly homologous to the gamma 1 chain; however, it lacks domain VI, and domains V, IV and III are shorter. It is expressed in several fetal tissues but differently from gamma 1, and is specifically localized to epithelial cells in skin, lung and kidney. The gamma 2 chain together with alpha 3 and beta 3 chains constitute laminin 5 (earlier known as kalinin), which is an integral part of the anchoring filaments that connect epithelial cells to the underlying basement membrane. The epithelium-specific expression of the gamma 2 chain implied its role as an epithelium attachment molecule, and mutations in this gene have been associated with junctional epidermolysis bullosa, a skin disease characterized by blisters due to disruption of the epidermal-dermal junction. Two transcript variants resulting from alternative splicing of the 3' terminal exon, and encoding different isoforms of gamma 2 chain, have been described. The two variants are differentially expressed in embryonic tissues, however, the biological significance of the two forms is not known. Transcript variants utilizing alternative polyA\_ signal have also been noted in literature.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: WB (1:500-1:2000), IHC-P (1:100-1:300), ELISA (1:20000). Not yet tested in other applications.

**Storage Buffer:** PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

	<p>Fig.1. Western Blot analysis of K562 cells using Laminin <math>\gamma</math>-2 Polyclonal Antibody. Secondary antibody (catalog#: A21020) was diluted at 1:20000.</p>
	<p>Fig.2. Immunohistochemical analysis of paraffin-embedded human liver, antibody was diluted at 1:100.</p>

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