

Product datasheet for **TA363877**

HBB Mouse Monoclonal Antibody [Clone ID: PLA114]

Product data:

Product Type:	Primary Antibodies
Clone Name:	PLA114
Applications:	ELISA, IHC
Recommended Dilution:	Tested for immunohistochemistry (IHC) and Western Blot, other applications not yet tested. Approximate working dilutions: IHC, frozen sections: 0.2µg/ml (1:2000) IHC, paraffin sections: 10µg/ml (1:40) Western Blot: 0.25µg/ml (1:2000) Optimal dilutions should be determined by the end user.
Reactivity:	Porcine
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Porcine liver extract.
Specificity:	Pig: Erythrocytes, plasma Other species: not tested

Epitope: Immunoprecipitation and subsequent identification by nanoLC- ESI-MS/MS identified the antigen as hemoglobin beta chain. The epitope has not been further characterized.

Distribution: Tissue sections: In paraffin sections the antibody stains all erythrocytes whereas in frozen sections the antibody yields a picture typical of a molecule leaking out of blood vessels and diffusing into surrounding tissue.

Formulation:	Affinity purified from cell culture supernatant, lyophilized. Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.05% (v/v) Kathon CG as a preservative.
Concentration:	N/A
Conjugation:	Unconjugated
Storage:	Original vial: 1 year at 4° - 8°C. Avoid repeated thawing and freezing of the reconstituted antibody.



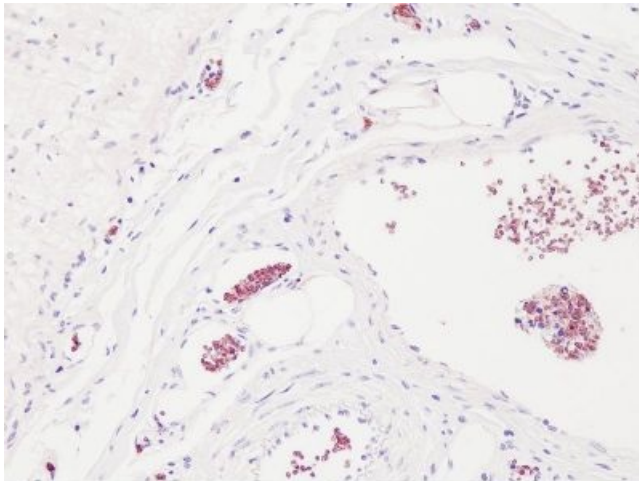
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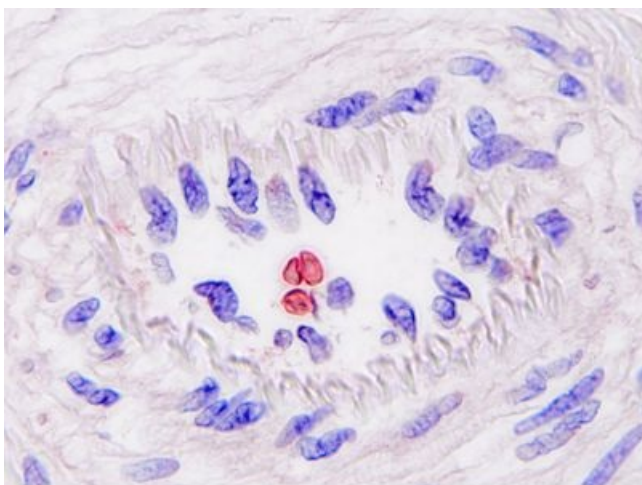
Background: Monoclonal antibody PLA114 is specifically directed against the porcine hemoglobin beta subunit. Hemoglobin contains four subunits, of which two are identical. They form the $\alpha_2\beta_2$ scaffold that holds the iron-containing heme group which is responsible for oxygen transport by red blood cells. Each subunit has a molecular weight of about 16kDa. In humans, the beta-globin gene is activated around the time of birth, replacing embryonic and fetal globin genes. In humans, mutations in the adult β -globin gene cause β -thalassemia and sickle cell disease (SCD). β -Thalassemia results from a reduced production of β -globin while SCD is caused by a mutation that results in an amino acid substitution of adult β -globin. Hemoglobin tetramers bearing this mutation polymerize inside red blood cells and distort them into a characteristic crescent-shaped appearance. These rigid sickle cells are more prone to lysis and tend to occlude blood flow in the microvasculature, causing severe physiological problems. This antibody was produced serum-free, without fetal calf serum.

Synonyms: beta-globin; CD113t-C; HBD

Product images:



TA363877, Clone PLA-114, swine ileum, paraffin section



TA363877, Clone PLA-114, swine ileum, paraffin section