

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human BVES in direct ELISAs
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human BVES Met1-Asn36 Accession # Q8NE79
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

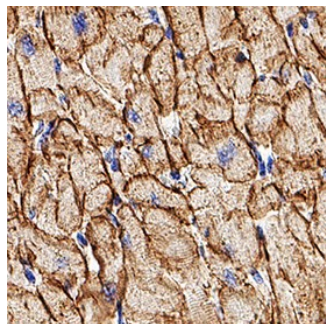
**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	5-25 µg/mL	Immersion fixed paraffin-embedded sections of Human Heart

**DATA**

**Immunohistochemistry**



**Detection of BVES in Human Heart.** BVES was detected in immersion fixed paraffin-embedded sections of Human Heart using Sheep Anti-Human BVES Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4986) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Sheep IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC006). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane in cardiomyocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

BVES (blood vessel epicardial substance; also Popeye 1) is a 58 kDa, glycoprotein member of the Popeye family of multispan transmembrane (TM) molecules. It is expressed on embryonic epicardial epithelium plus atrial myocytes and on adult skeletal and cardiac muscle. It serves as a component of the epithelial tight junction, dimerizing with itself and interacting with ZO-1. Human BVES is 360 amino acids (aa) in length. It contains an extracellular N-terminus of 48 aa, three TM domains (aa 49-113) and a large C-terminal cytoplasmic region (aa 114-360) that contains a Popeye domain (aa 123-266). Homodimerization occurs via aa 268-274. There is one potential splice variant that shows a premature truncation after Glu213. Over aa 1-36, human BVES is 72% aa identical to mouse BVES.