

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Brorin/VWC2 in direct ELISAs and Western blots. In direct ELISAs, approximately 100% cross-reactivity with recombinant human Brorin/VWC2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Brorin/VWC2 Ser28-Met324 Accession # Q8C8N3
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

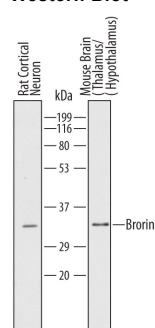
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

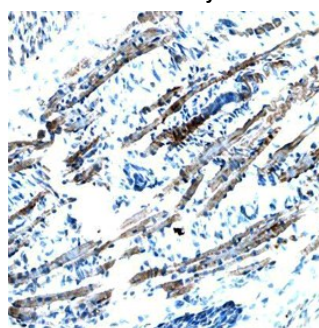
Western Blot



Detection of Mouse and Rat Brorin/VWC2 by Western Blot.

Western blot shows lysates of rat cortical neuron tissue and mouse brain (thalamus/hypothalamus) tissue. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Mouse Brorin/VWC2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6730) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Brorin/VWC2 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



Brorin/VWC2 in Mouse Embryo.

Brorin/VWC2 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using Sheep Anti-Mouse Brorin/VWC2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6730) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of mesenchyme/muscle cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse VWC2 (von Willebrand Factor C domain-containing protein 2; also Brorin and cradin) is a secreted, 35 kDa (predicted) member of the chordin family of proteins. It is expressed in the choroid plexus and by neurons in multiple sites, and serves to sequester BMP family proteins such as BMP-2 and BMP-6. BMP antagonism is suggested to generate neurons from neural precursor cells at the expense of astrocytes. Mouse VWC2 precursor is 324 amino acids (aa) in length. It contains a 27 aa signal sequence, one poly-Ala region (aa 124-129), and two von Willebrand factor C domains (aa 152-211 and 215-273) that likely serve as BMP interaction sites. Over aa 28-324, mouse VWC2 shares 90% aa identity with human VWC2.