

DESCRIPTION

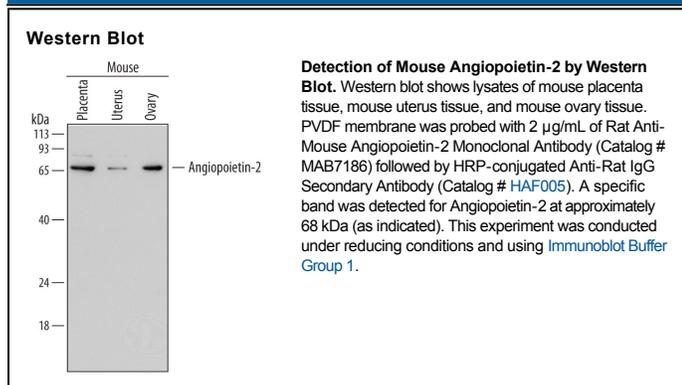
Species Reactivity	Mouse
Specificity	Detects mouse Angiopoietin-2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) Angiopoietin-1, rmAngiopoietin-3, recombinant human (rh) Angiopoietin-2, and rhAngiopoietin-4 is observed. In Western blots, 100% cross-reactivity with rmAngiopoietin-1 is observed and less than 10% cross-reactivity with rhAngiopoietin-2, rhAngiopoietin-4, and rmAngiopoietin-3 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 748246
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Angiopoietin-2 Asp68-Phe496 Accession # O35608
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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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

Angiopoietin-2 (Ang-2; also ANGPT2) is a secreted 66-70 kDa glycoprotein member of the angiopoietin family of growth factors. It is expressed by endothelial cells, macrophages and skeletal muscle fibers, and binds to the Tie2 receptor on select cell types, including endothelial cells and monocytes. Ang-2 has multiple functions. In the presence of growth factors, it promotes angiogenesis; in the absence of growth factors, it induces vascular regression. It is generally considered to be an antagonist of Ang-1 activity. Mature mouse Ang-2 is 478 amino acids (aa) in length (aa 19-496). It contains one coiled-coil region (aa 159-256) plus a C-terminal Fibrinogen-like domain (aa 275-495). Mouse Ang-2 undergoes covalent oligomerization, forming 140 kDa homodimers and 280 kDa homotetramers. The higher-order oligomers are strong Tie-2 agonists. Over aa 68-496, mouse Ang-2 shares 87% and 96% aa sequence identity with human and rat Ang-2, respectively.