Purified anti-mouse/rat CD62E (E-selectin) Antibody

Catalog# / Size	148801 / 50 µg 148802 / 500 µg
Clone	RME-1/CD62E
Regulatory Status	RUO
Other Names	E-selectin, ELAM-1, LECAM-1
Isotype	Mouse IgG1, κ
Description	CD62E (also known as E-selectin, ELAM-1, and LECAM-1) is a 115 kD type I transmembrane protein and a member of the selectin family. CD62E is highly expressed on activated endothelial cells. CD62E is involved in leukocyte tethering and rolling on activated endothelium at inflammatory sites and may also play a role in tumor metastasis and angiogenesis. CD62E binds to both Sialyl Lewis X (CD15s) and PSGL-1 (CD162).

Product Details

Verified Reactivity	Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Rat E-selectin transfected chinese hamster ovary cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	IHC-F - *Quality tested* ICC - *Verified* WB, IP, ELISA, Block - *Reported in the literature, not verified in house*
Recommended Usage	Each lot of this antibody is quality control tested by immunohistochemical staining on frozen tissue sections. For immunohistochemistry, a concentration range of 2.5 - 5.0 µg/mL is suggested. For immunocytochemistry, a concentration range of 5.0 - 10 µg/mL is recommended. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue sections[4,5], Western blotting[1], immunoprecipitation[1], ELISA[7], and blocking[1,2,3]. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 148803).
Application References **(PubMed link indicates BioLegend citation)**	1. Walter UM, *et al.* 1997. *Hybridoma* 16:249. (Block, WB, IP) 2. Walter UM, *et al.* 1997. *Immunology* 92:290. (Block, Rat Reactivity) 3. Hickey MJ, *et al.* 1998. *Circ. Res.* 83:1124. (Block, Mouse Reactivity) 4. Bernardes-Silva M, *et al.* 2001. *J. Cereb. Blood Flow Metab.* 21:1115. (IHC) 5. Alvarez A, *et al.* 2004. *Blood* 104:402. (IHC, Rat Reactivity) 6. Piccio L, *et al.* 2002. *J. Immunol.* 168:1940. (IF) 7. Walter UM, *et al.* 1997. *in Hybridoma* 16:355. (ELISA)
Product Citations	1. King D, *et al.* 2019. Sci Rep. 9:4157. PubMed
RRID	AB_2564222 (BioLegend Cat. No. 148801) AB_2564223 (BioLegend Cat. No. 148802)

Antigen Details

Structure	Member of the selectin family, 115 kD type I membrane protein; contains one C-type lectin domain and one EGF-like domain
Distribution	Highly expressed on activated endothelial cells
Function	Involved in leukocyte tethering and rolling on activated endothelium at inflammatory sites, may also play a role in tumor metastasis and angiogenesis
Ligand/Receptor	Sialyl Lewis X (CD15s) and PSGL-1 (CD162) bind to CD62E. Recently, CLA (cutaneous lymphocyte antigen) has also been reported to interact with CD62E
Cell Type	Endothelial cells
Biology Area	Cell Adhesion, Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Collins T, *et al.* 1991. *J. Biol. Chem.* 266:2466 2. Bevilacqua MP, *et al.* 1987. *Proc. Natl. Acad. Sci. USA* 84:9238 3. Berg EL, *et al.* 1991. *J. Exp. Med.* 174:1461. 4. Lawrence MB, *et al.* 1993. *J. Immunol.* 151:6338. 5. Walz G, *et al.* 1990. *Science* 250:1132
Gene ID	20351

Related Protocols

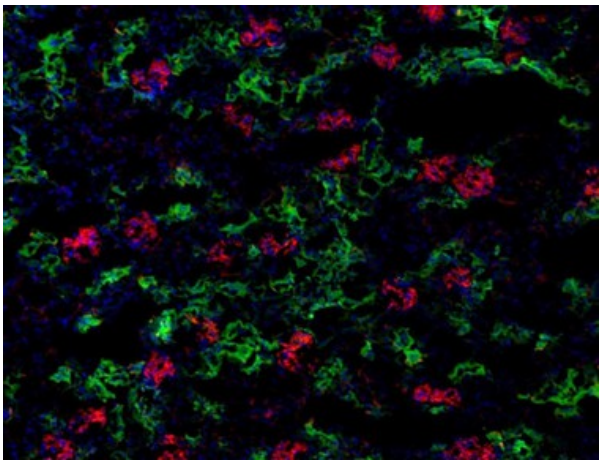
Immunohistochemistry Protocol for Frozen Sections

Immunocytochemistry Staining Protocol

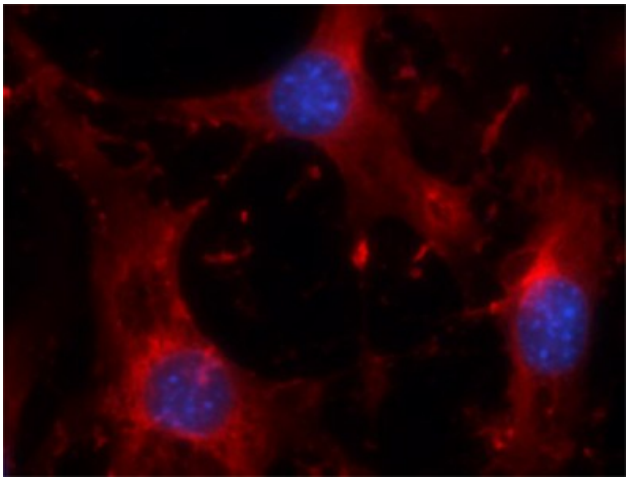
Other Formats

Purified anti-mouse/rat CD62E (E-selectin), Ultra-LEAF™ Purified anti-mouse/rat CD62E (E-selectin)

Product Data



C57BL/6 mouse frozen kidney section was fixed with 4% paraformaldehyde (PFA) for 10 minutes at room temperature and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 5 µg/ml of purified anti-mouse CD62E (clone RME-1/CD62E) overnight at 4°C followed by 2.5µg of anti-mouse IgG Alexa Fluor® 488 (red) and Alexa Fluor® 594 anti-mouse CD326/Ep-CAM (clone G8.8) antibody (green) for 2 hours at room temper



Mouse brain endothelial cell line *bEND.3* cells were stimulated with TNF-α overnight. Then the cells were fixed with 1% paraformaldehyde (PFA) for 10 minutes and blocked with 5% FBS for 30 minutes, subsequently stained with 5 µg/ml of purified anti-mouse/rat CD62E (clone RME-1/CD62E) (red) in blocking buffer for 3 hours at room temperature followed by DyLight™ 594 Goat anti-mouse IgG for another 2 hours at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured with 40X objective.

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