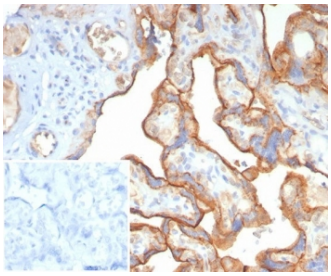
BSG Antibody / Basigin / CD147 [clone BSG/7955] (V4600)

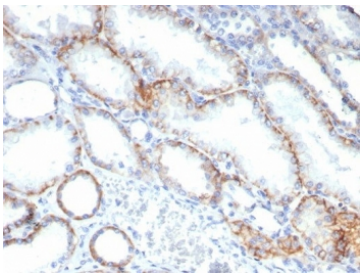
Catalog No.	Formulation	Size
V4600-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4600-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4600SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

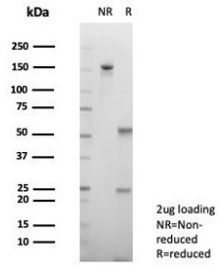
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	BSG/7955
Purity	Protein A/G affinity
UniProt	P35613
Localization	Cell surface
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This CD147 antibody is available for research use only.



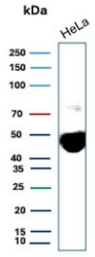
Immunohistochemistry analysis of BSG antibody in human placental tissue (clone BSG/7955). FFPE human placenta sections demonstrate HRP-DAB brown membranous and cytoplasmic staining in trophoblastic cells lining chorionic villi. The staining pattern highlights strong cell surface localization consistent with CD147 Basigin expression in placental epithelium, while underlying stromal cells show comparatively weaker signal. The inset shows PBS used in place of primary antibody as a secondary antibody negative control, demonstrating absence of specific brown staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



IHC staining of FFPE human renal cell carcinoma tissue with BSG antibody (clone BSG/7955) at 2ug/ml. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free BSG antibody (clone BSG/7955) as confirmation of integrity and purity.



Western blot testing of human HeLa cell lysate with BSG antibody. Predicted molecular weight: ~27 kDa (unmodified), 43-66 kDa (glycosylated).

Description

BSG antibody, also known as Basigin antibody, recognizes CD147, a transmembrane glycoprotein encoded by the human BSG gene located on chromosome 19p13.3. Basigin is a member of the immunoglobulin superfamily and is widely referred to in the literature as CD147, Emmprin, and Extracellular matrix metalloproteinase inducer. BSG antibody detects a cell surface protein predominantly localized to the plasma membrane, where it regulates cell-cell interactions and extracellular signaling events.

Basigin contains two extracellular immunoglobulin-like domains, a single transmembrane segment, and a short cytoplasmic tail. Through its extracellular domains, CD147 interacts with integrins, cyclophilins, and matrix metalloproteinases, promoting extracellular matrix remodeling and intercellular communication. The Emmprin designation reflects its ability to stimulate matrix metalloproteinase production in adjacent stromal fibroblasts, contributing to tissue invasion and matrix degradation. BSG antibody supports research focused on these matrix-associated signaling mechanisms.

CD147 is broadly expressed in epithelial cells, endothelial cells, leukocytes, and numerous tumor cell types. Elevated expression has been documented in breast, lung, colorectal, hepatocellular, and head and neck cancers, where increased CD147 levels are associated with tumor progression, angiogenesis, and metastatic potential. In addition to its role in matrix remodeling, Basigin regulates cellular metabolism through its interaction with monocarboxylate transporters, facilitating lactate export in highly glycolytic tumor cells. BSG antibody is therefore frequently used in studies examining tumor metabolism and hypoxic microenvironments.

Beyond oncology, CD147 participates in immune and inflammatory signaling. It functions as a receptor for extracellular cyclophilins and contributes to leukocyte activation and chemotaxis. Expression is also observed in reproductive tissues and during development, reflecting broader roles in tissue remodeling and cellular differentiation. Clone BSG/7955 is developed to recognize CD147 for research applications. This antibody targets Basigin in research settings and supports investigations into cancer biology, inflammation, and metabolic regulation.

Application Notes

Optimal dilution of the BSG antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the CD147 antibody.

Storage

Aliquot the BSG antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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