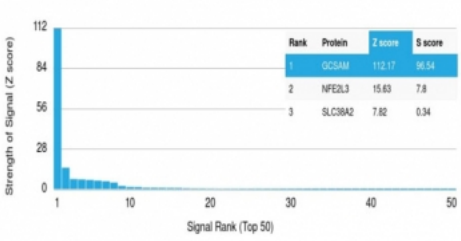
# HGAL Antibody / Germinal Center B-Cell Marker Antibody [clone HGAL/2834] (V4982)

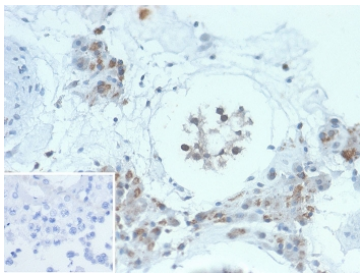
| Catalog No. | Formulation | Size |
|---|---|---|
| V4982-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V4982-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V4982SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium 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** | HGAL/2834 |
| **Purity** | Protein A/G affinity |
| **UniProt** | Q8N6F7 |
| **Localization** | Cytoplasm, Cell membrane |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT |
| **Limitations** | This HGAL Antibody / Germinal Center B-Cell Marker Antibody is available for research use only. |




HGAL Antibody Protein Microarray Validation. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using HGAL Antibody demonstrates highly selective recognition of HGAL / GCSAM with strong separation from non-target proteins across the tested human proteome. These results demonstrate the foremost specificity of the HGAL/2834 mAb and support highly specific detection of germinal center-associated B-cell differentiation and lymphoma-associated signaling pathways. The Z-score represents the strength of antibody binding signal relative to the overall array mean, while the S-score reflects target specificity relative to the next highest ranked protein signal. Elevated S-score separation supports preferential target recognition with minimal off-target binding across the tested human proteome.



HGAL Antibody Testis IHC. Immunohistochemistry analysis of FFPE human testis tissue stained with HGAL Antibody demonstrates cytoplasmic and focal nuclear HRP-DAB brown staining within scattered germinal center-associated lymphoid cells and immune-associated cellular populations. This germinal center B-cell marker antibody highlights HGAL / GCSAM-associated immune differentiation pathways and lymphoma-related germinal center signaling biology. Inset: PBS used in place of primary antibody demonstrates minimal background staining in the secondary antibody negative control. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

## Description

HGAL, also known as GCSAM (Germinal center-associated signaling and motility), is a germinal center-associated protein involved in B-cell differentiation, lymphocyte signaling, cytoskeletal regulation, and germinal center-associated immune responses. HGAL expression is strongly associated with germinal center B lymphocytes and subsets of B-cell lymphomas, where it contributes to regulation of cellular motility and signaling pathways involved in adaptive immune organization. HGAL Antibody is useful for investigations involving germinal center biology, B-cell differentiation, hematopathology, and lymphoma-associated immune signaling pathways.

HGAL antibody, also referred to as GCSAM antibody, Germinal center-associated signaling and motility antibody, and GCET2 antibody in the literature, recognizes a cytoplasmic protein encoded on chromosome 3q13.2. HGAL localizes predominantly to the cytoplasm of germinal center-associated B-cell populations where it participates in signaling pathways regulating lymphocyte motility, actin-associated cytoskeletal organization, and immune microenvironment interactions. Expression of HGAL is strongly associated with germinal center-derived lymphoid tissues and germinal center-associated lymphoma subtypes including follicular lymphoma and subsets of diffuse large B-cell lymphoma.

HGAL Antibody / Germinal Center B-Cell Marker Antibody (clone HGAL/2834) is uniquely positioned for studies involving germinal center-associated B-cell differentiation and lymphoma characterization. This mouse monoclonal antibody demonstrates strong immunohistochemical detection together with HuProt(TM) microarray specificity validation against more than 19,000 full-length human proteins. The combined validation profile supports use of clone HGAL/2834 in investigations involving germinal center-associated immune organization, B-cell lineage characterization, and lymphoma-associated differentiation pathways.

Analysis of HuProt(TM) microarrays containing more than 19,000 individually purified full-length human proteins demonstrated highly selective recognition of HGAL/GCSAM by clone HGAL/2834. In HuProt(TM) analysis, the Z-score represents the strength of antibody binding signal relative to the overall array mean, while the S-score reflects target specificity relative to the next highest ranked protein signal. Elevated S-score separation supports preferential target recognition and reduced off-target binding across the tested human proteome. This specificity validation strategy is particularly valuable in studies involving heterogeneous lymphoid tissues and hematopathology-associated cellular populations.

HGAL contributes to regulation of B-cell receptor-associated signaling pathways and suppression of lymphocyte motility through interactions with cytoskeletal regulatory proteins. Altered HGAL expression has been associated with germinal center-associated lymphoma biology, lymphoid differentiation status, immune microenvironment organization, and tumor-associated signaling regulation. Because HGAL expression is highly enriched in germinal center B-cell populations, it serves as an important marker for investigations involving germinal center lineage identification and lymphoma-associated immunophenotyping.

This HGAL Antibody supports research involving germinal center B-cell differentiation, lymphoma-associated immune signaling, hematopathology, lymphocyte motility regulation, adaptive immune organization, cytoskeletal signaling pathways, and germinal center-associated cellular regulation. Clone HGAL/2834 may be incorporated into immunohistochemistry and tissue-based investigations examining germinal center lineage-associated immune

differentiation in normal and diseased tissues.

Explore additional lymphoma and immune differentiation pathway markers on our Cancer Antibodies page, including antibodies targeting germinal center biology, B-cell lineage signaling, and hematopathology-associated cellular regulation.

## Application Notes

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

## Immunogen

A recombinant partial protein sequence (within amino acids 1-200) from the human protein was used as the immunogen for the GCSAM / HGAL antibody.

## Storage

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

## Alternate Names

HGAL antibody, GCSAM antibody, Germinal center-associated signaling and motility antibody, Germinal center B-cell marker antibody, GCET2 antibody


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