

CD38 (SP149)

Format	Catalog No.	Pack size	Dilution
Concentrated	G183326 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G183326 AA, BB	6.0, 3.0 mL	Ready to use

ANTIBODY SPECIFICATIONS

- **HOST SPECIES:** Rabbit
- **CLONE:** SP149
- **ISOTYPE:** IgG
- **CELLULAR LOCALIZATION:** Cytoplasmic, Membranous
- **IMMUNOGEN:** C-terminal region of CD38 protein
- **MOLECULAR WEIGHT:** ~46 kDa.
- **SPECIES REACTIVITY:** Human
- **POSITIVE CONTROL:** Plasma cell myeloma, Plasma Cells, Lymph node, Bone Marrow

INTENDED USE

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of CD38 protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

SUMMARY AND APPLICATION

The molecular weight of the CD38 protein, which the CA38 Antibody [SP149] is intended to detect, is roughly 46 kDa. This antibody is specific to the CD38 protein and is a rabbit monoclonal antibody. The molecular weight of CD38, a type-II transmembrane glycoprotein, is 46 kDa. It is present in several solid tumour tissues and is expressed on a variety of haematopoietic cells, including plasma cells.

SCIENTIFIC BACKGROUND:

The 46-kDa type-II transmembrane glycoprotein known as CD38 has a large extracellular domain (256 amino acids) and a short N-terminal cytoplasmic tail (20 amino acids). It can be seen in certain solid tumour tissues and on a variety of haematopoietic cells, particularly plasma cells. One of the early indicators of mature naive B-cell activation, CD38 is helpful in determining functional subsets of mature B-lymphocytes.

RECOMMENDED USAGE

- **IHC Protocol Highlights:**
 - Dilution: 1–2 µg/mL
 - Incubation: 30 minutes at room temperature
 - Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

FORMULATION & STORAGE:

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide
- Storage:
 - o Dilution: 1–2 µg/ML
 - o Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

LIMITATIONS

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

PRECAUTIONS

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

TECHNICAL SUPPORT

For technical assistance, please contact Genebio Solution's Technical Support at www.genebiosolution.com