### bsm-55541R

## [ Primary Antibody ]

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# Transglutaminase 2 Recombinant Rabbit mAb

DATASHEET -

Host: Rabbit Isotype: IgG Clonality: Recombinant CloneNo.: 17E10 GeneID: 7052 **SWISS:** P21980

Target: Transglutaminase 2

**Immunogen:** A synthesized peptide derived from human TGM2: 560-615/687.

**Purification:** Affinity Purification

**Storage:** PBS with 100 µg/ml BSA,0.15% ProClin300 and 50% glycerol. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Calcium-dependent acyltransferase that catalyzes the formation of

covalent bonds between peptide-bound glutamine and various primary amines, such as gamma-amino group of peptide-bound lysine, or mono- and polyamines, thereby producing cross-linked or aminated proteins, respectively. Involved in many biological processes, such as bone development, angiogenesis, wound healing, cellular differentiation, chromatin modification and apoptosis. Acts as a protein-glutamine gamma-glutamyltransferase by mediating the cross-linking of proteins, such as ACO2, HSPB6, FN1, HMGB1, RAP1GDS1, SLC25A4/ANT1, SPP1 and WDR54. Under physiological conditions, the protein cross-linking activity is inhibited by GTP; inhibition is relieved by Ca(2+) in response to various stresses. When secreted, catalyzes cross-linking of proteins of the extracellular matrix, such as FN1 and SPP1 resulting in the formation of scaffolds. Plays a key role during apoptosis, both by (1) promoting the crosslinking of cytoskeletal proteins resulting in condensation of the cytoplasm, and by (2) mediating cross-linking proteins of the extracellular matrix, resulting in the irreversible formation of scaffolds that stabilize the integrity of the dying cells before their clearance by phagocytosis, thereby preventing the leakage of harmful intracellular components.

Applications: WB (1: 500- 2000)

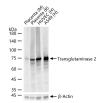
**IHC-P** (1: 100-500) **IHC-F** (1: 100-500) **IF** (1: 100-500)

Reactivity: Human, Mouse, Rat

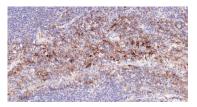
Predicted MW.:

Subcellular Cytoplasm Location:

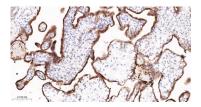
### - VALIDATION IMAGES -



25 ug total protein per lane of various lysates (see on figure) probed with Transglutaminase 2 monoclonal antibody, unconjugated (bsm-55541R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Gastric Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Transglutaminase 2 Monoclonal Antibody, Unconjugated(bsm-55541R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Placenta; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Transglutaminase 2 Monoclonal Antibody,

Unconjugated(bsm-55541R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.