

TGM2 Conjugated Antibody

Catalog No: #C38158



Package Size: #C38158-AF350 100ul #C38158-AF405 100ul #C38158-AF488 100ul
 #C38158-AF555 100ul #C38158-AF594 100ul #C38158-AF647 100ul
 #C38158-AF680 100ul #C38158-AF750 100ul #C38158-Biotin 100ul

Orders: order@signalwayantibody.com
 Support: tech@signalwayantibody.com

Description

| | |
|-----------------------|--|
| Product Name | TGM2 Conjugated Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Species Reactivity | Hu Ms Rt |
| Specificity | The antibody detects endogenous level of total TGM2 antibody. |
| Immunogen Description | Recombinant protein of human TGM2. |
| Conjugates | Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750 |
| Other Names | TGM2;G-ALPHA-h;GNAH;TG2;TGC ; |
| Accession No. | Swiss-Prot#:P21980NCBI Gene ID:7052 |
| Uniprot | P21980 |
| GeneID | 7052; |
| Excitation Emission | AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm |
| Calculated MW | 77 |
| Formulation | 0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide |
| Storage | Store at 4°C in dark for 6 months |

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

Transglutaminase 2 (TGM2) is a calcium-dependent enzyme that cross-links both cytosolic and extracellular matrix proteins by catalyzing the formation of bonds between lysine and glutamine residues (1). This bifunctional enzyme also has intrinsic GTPase activity, and it has been suggested that regulation of the transamidase activity might be regulated through a G-protein coupled receptor-signaling pathway (2). In cross-linking peptides, TGM2 helps to regulate cytoskeletal structure, cell migration, apoptosis and cell-matrix adhesion. In addition, the enzyme plays an important role in wound healing and the immune response (3). TGM2 has exhibited kinase activity in vitro, with insulin-like growth factor-binding protein-3 (IGFBP-3) as one possible substrate (4). This widely expressed protein is localized to the cytosol and nucleus, but has also been isolated from the cell surface and extracellular matrix (reviewed in 5). Because of its interaction with a number of different substrates, and its role in the response to injury, TGM2 has been associated with the pathology of a number of human disorders. It has long been recognized as the major autoantigen in celiac disease (6); altered TGM2 expression or activity may be associated with Alzheimer disease, Huntington disease, arteriosclerosis, diabetes, and numerous forms of cancer (reviewed in 7).

Note: This product is for in vitro research use only