

Mouse Anti-RAGE [MD367]: MC0080

Intended Use: For Research Use Only

Description: The Receptor for Advanced Glycation End-products (RAGE) is a gene located on human chromosome 6p21.3, encoding a transmembrane receptor on the surface of endothelial cells, mononuclear phagocytes, and vascular smooth muscle cells, where RAGE functions as a key receptor for advanced glycation end products (AGEs), S100 proteins, and high-mobility group box 1 (HMGB1). RAGE is expressed in various tissues, with significant levels in the lungs, and plays a crucial role in cellular signaling and inflammation. As a receptor, RAGE binds multiple ligands, including advanced glycation end-products (AGEs), amyloid- β peptide, high mobility group box 1 (HMGB1), and S100/calgranulin proteins, facilitating diverse pathological processes like inflammation, cancer progression, and neurodegeneration. RAGE is implicated in the pathogenesis of numerous chronic diseases such as diabetes, atherosclerosis, Alzheimer's disease, and other inflammatory and vascular disorders. This antibody serves as an indispensable tool for researchers seeking to elucidate the intricate roles of RAGE in various disease states and to explore potential strategies for therapeutic intervention.

Specifications

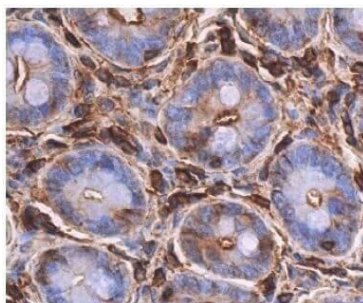
Clone:	MD367
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human, mouse, rat
Immunogen:	Epitope aa 23-43 at the N-terminus of human RAGE
Localization:	Membrane, cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA, and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, IP, WB
Package:	

Description	Catalog No.	Size
RAGE Concentrated	MC0080	1 ml

IHC Procedure*:

Positive Control:	Colon, lung, placenta
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human colon stained with anti-RAGE using DAB

References:

1. Increased alpha-synuclein and neuroinflammation in the substantia nigra triggered by systemic inflammation are reversed by targeted inhibition of the receptor for advanced glycation end products (RAGE). Peixoto, DO. et al. J Neurochem., 2023.
2. Methylglyoxal reduces molecular responsiveness to 4 weeks of endurance exercise in mouse plantaris muscle. | Egawa, T. et al. J Appl Physiol (1985). 132: 477-488, 2022.

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