



Human Anti-SARS-CoV-2 Nucleoprotein Monoclonal antibody, clone CO16 (CABT-CS274)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Binding to N-ter of SARS-CoV-2 NP. Do not react with the C-ter fragment of SARS-CoV-2 NP.
Target	SARS-CoV-2 NP
Isotype	IgG
Source/Host	Human
Species Reactivity	SARS-CoV-2
Clone	CO16
Purification	≥95% as determined by SDS-PAGE. Protein A purified
Conjugate	unconjugated
Applications	ELISA
Format	Liquid
Size	100 µg, 1 mg
Buffer	Tris-Gly
Preservative	None
Storage	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

BACKGROUND

Introduction

Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. The coronavirus N protein is required for coronavirus RNA synthesis and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to the formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of the N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

Keywords

SARS-CoV-2; SARS-CoV-2 N Protein; SARS-CoV-2 NP; SARS-CoV-2 Nucleocapsid Protein