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## Product Information

### Anti-CFTR

(Cystic Fibrosis Transmembrane Conductance Regulator)

Developed in Rabbit, Affinity Isolated Antibody

Product Number **C 7491**

### Product Description

Anti-CFTR was developed in rabbit using a synthetic peptide G R I I A S Y D P D N K E E R, corresponding to amino acid residues 103-117 from human CFTR protein as the immunogen. This sequence is 100% conserved in human, rabbit, and monkey and there is a one amino acid substitution in rat, bovine, and sheep. The antibody was affinity isolated on immobilized immunogen.

Anti-CFTR recognizes CFTR from cells overexpressing the human protein. Immunocytochemical staining of HEK293 cells overexpressing human CFTR with this antibody results in staining primarily of the plasma membrane.

The cystic fibrosis transmembrane conductance regulator (CFTR) is a cAMP regulated chloride ion channel involved in normal fluid transport across various epithelia<sup>1</sup>. Mutations of the gene coding for this protein cause cystic fibrosis, the most common lethal genetic disease among Caucasians.<sup>1,2</sup> CFTR also functions as a regulator of other ion channels and of intracellular membrane transport processes.<sup>2,3</sup>

### Reagent

The antibody is supplied as 100 µg (1 mg/mL) of affinity isolated antibody in phosphate buffered saline containing 1.0 mg/mL BSA and 0.05 % sodium azide as preservative.

### Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling.

### Storage/Stability

Store at -20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

### Product Profile

The recommended working dilution is 1 µg/ml for immunocytochemistry.

**Note:** In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

### References

1. Gadsby, D.C. and Nairn, A.C., Control of CFTR channel gating by phosphorylation and nucleotide hydrolysis, *Physiol Rev.*, **79**, S77-S107 (1999).
2. Vankeerberghen, A., et al., The cystic fibrosis transmembrane conductance regulator: an intriguing protein with pleiotropic functions, *J. Cyst. Fibros.*, **1**, 13-29 (2002).
3. Nilius, B. and Droogmans, G., Amazing chloride channels: an overview, *Acta Physiol. Scand.*, **177**, 119-147 (2003).

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