

Opti coughPan[®]

SYRUP

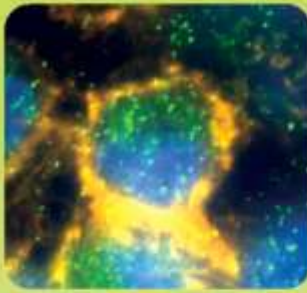


WINTER BEGUN..!!
COUGH will BE GONE

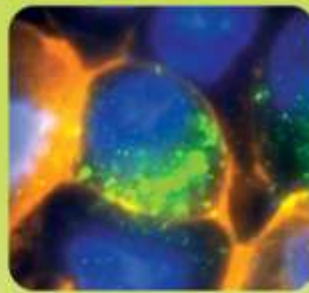
Opti coughPan[®]

SYRUP

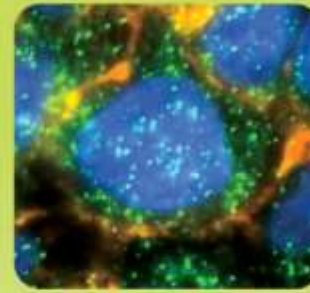
Immunohistochemical detection of β_2 receptors of alveolar cells type II (green fluorescent)⁽³⁾



A) Untreated A 549-Cell



B) Internalization of β_2 receptors after stimulation with $10\mu\text{M}$ terbutalin



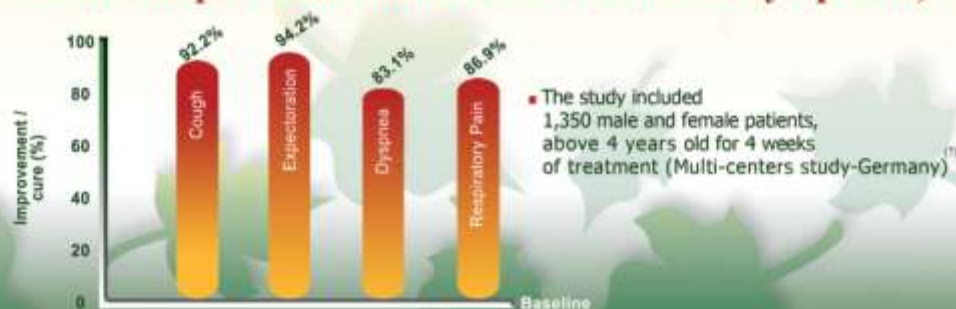
C) Inhibition of β_2 receptor internalization within stimulating conditions ($10\mu\text{M}$ terbutalin) resulting from preincubation with $1\mu\text{M}$ α -hederin

ALPHA -HEDERIN magnify the bronchodilator signals

SIGNIFICANT DROP IN THE ENDOCYTOSIS OF β -2 RECEPTOR⁽⁴⁾
(50-80%) THROUGH ALFA -HYDRIN DEPENDING ON THE CONCENTRATION

- **Expectorant** the ivy leaf extract contains emetine which has Expectorant effect on respiratory secretion⁽⁵⁾
- **Mucolytic** through gastric parasympathatic stimulation to bronchial glands for more thin secretions that easily coughed up.⁽⁶⁾

(Distinctive Improvement of Chronic Bronchitis symptoms)



Opti coughPan[®]

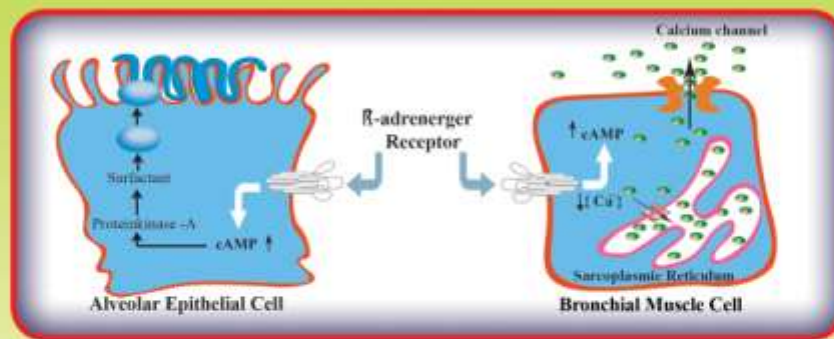
SYRUP

COPD
Acute bronchitis
chronic bronchitis
Asthmatic Bronchitis

» Over stimulation of β_2 Receptor
(Adrenaline-Turbutaline)

» Internalization of β_2 Receptor
[endocytosis of the receptor]

ALPHA-hederin inhibit the internalization of β_2 receptor⁽¹⁾



Stimulation of beta 2 receptors will

Increase Surfactant production

- 1- Optimize ventilation of the lung
- 2- Improve transport of mucous
- 3- Lower the mucus viscosity (liquifies mucous)(**mucolytic**)⁽²⁾

Lower intracellular . Ca⁺⁺
Relaxation of bronchial muscle
(**bronchodilator**).

Surfactant:

is a mixture of substances which protect the alveoli from collapsing at the end of the expiration phase by lowering the surface tension of the liquid film on the alveoli.

Opti coughPan®

Peaceful nights sleep SYRUP

Composition:

0.7 gm Dried ivy leaf extract in 100 ml solution.

- Marked improvement in obstructive airway symptoms and well tolerated in the same time.
- Non stop benefits
(Broncho-Spasmolytic /Mucolytic /Expectorant /Anti Inflammatory/Antioxidant) .
- Remarkable improvement in lung functions
(VC.FEVI. PEF. AIRWAY RESISTANCE)
- Approved by German Commission E.⁽⁸⁾
- Pleasant orange taste accepted by children and adults

Indication:

- Acute inflammation of respiratory tract accompanied by cough.
- Acute and asthmatic bronchitis.
- Bronchial asthma and wheezy chest.
- Chronic bronchitis
- Chronic obstructive pulmonary diseases



Dosage:

Children below 5 years → 2.5 ml three times daily
Children above 5 years → 5 ml three times daily
Adults above 12 years → 7.5 - 10 ml three times daily

Pack:

Bottle of 100 ml / Bottle of 120 ml

Reference:

(1) Continuation of pending international application PTC/EP 2004 filed on Mar.31,2004 designates US and was published in Germany, which claims priority of German patent application 10315931.2 filed on Apr. 2, 2003 (2) Rooney, S. A., Regulation of surfactant secretion. *Critp. Biochem. Physiol. A Mol. Integ. Physiol.* 129 (2001) 233-243. (3) Pierce, K. L., Premont, R. T., Lefkowitz, R. J., Seven-transmembrane receptors. *Nat. Rev. Mol. Cell Biol.* 3 (2002) 639-650. (4) *Deutsche Apotheker Zeitung* 143. Jahrgang 04. 12.2003 Nr. 49 & Ralf Schlegel, *Munich & Phytopharmaka. Wirkmechanismus von Efeuextrakt egschlüsselt.* (5) Weiss Rf herbal medicine, Göttenburg, sweden:AB Arcanum, 1985, 211. (6) Gulyas A., et al systemic therapy of chronic obstructive respiratory disease in children. *Atemwegs und Lungenkrankheiten* 1997, 23:291-294 Trüka,Gross J,Müchler E, Nahrstedt A in *Vitro Antispasmodic compounds of ivy extract obtained from Hedera helix plant* *Med Apr* 1997;63(2) : 125-9
(7) Hecker M, et al Treatment of chronic bronchitis with ivy leaf spacial extract, "Hedera helix-L." *Molecular drug research -multicenter post-marketing surveillance study in 1,350 patients. Forsch Komplementarmed Klass Naturheilkd* 2002, 9(2) : 77-84 (8) Ivy leaf "Health notes 2003".

For further information please contact Egypharma Scientific office:
24 Abbas Elakkad St., Nasr city, Cairo
Mob.: +20 01000 32 560
Tel & Fax: +202 228 71 991
E.Mail: egypharmaco@yahoo.com

