Table S1. Primers for qPCR.

Primer	Sequences (5′-3′)	Gene bank ID
IL6 F	ACTCACCTCTTCAGAACGAATTG	NM_000600.5
IL6 R	CCATCTTTGGAAGGTTCAGGTTG	
IL-1α F	ATGGCCAAAGTTCGAGACATG	NM_000575.4
IL-1α R	CTACGCCTGGTTTTCCAGTATCTGA	
TNFα F	ATGAGCACTGAAAGCATGATCC	NM_000594.4
TNFα R	GAGGGCTGATTAGAGAGAGGTC	
FLG F	GCAAGGTCAAGTCCAGGAGA	NM_00206.1
FLG R	CCCTCGGTTTCCACTGTCTC	
LOR F	GAGTTGGAGGTGTTTTCCAGGG	NM_000427.3
LOR R	GCAGAACTAGATGCAGCCGGA	
IVL F	TAACCACCCGCAGTGTCCAG	NM_005547.3
IVL R	ACAGATGAGACGGGCCACCTA	
GADPH F	GAAGGTCGGAGTCAACGGATT	NM_002046.7
GADPH R	TGACGGTGCCATGGAATTTG	

Table S2. Formula Composition.

Ingredient	Content (%)
carbomer	1%
Propylene glycol	15%
water	100%
DHA	0.1%

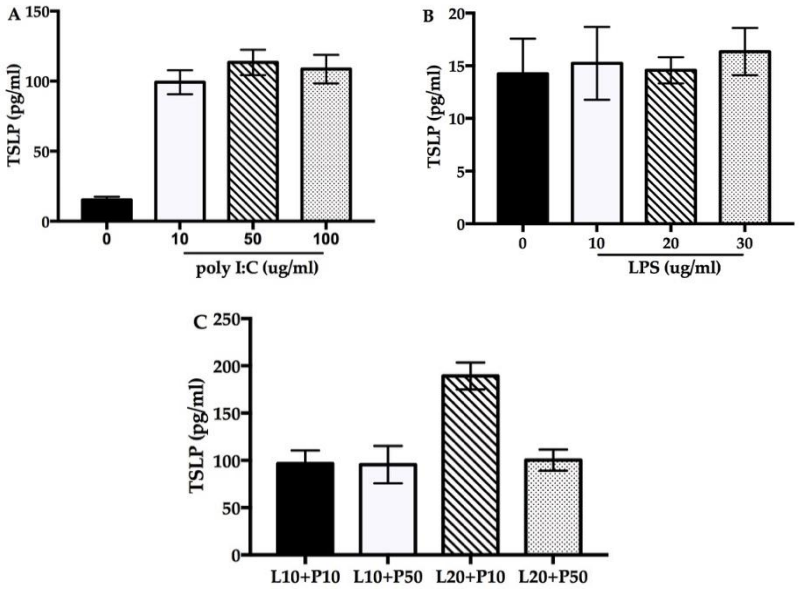

Figure S1. Effect of poly I:C, LPS and cocktail on the TSLP secretion in NHEK cells. The changes of TSLP were accessed by ELISA. (A) Effects of poly (I:C) on the TSLP secretion. (B) Effects of LPS on the TSLP secretion. (C) Effects of LPS + poly (I:C) on the TSLP secretion. Data are expressed as mean

± standard deviation (SD). Cocktail, LPS + poly (I:C); L, LPS, lipopolysaccharide; P, poly I:C, polyinosinic-polycytidylic acid; TSLP, Thymic stromal lymphopoietin.

Methods

LPS and poly I:C, we determined the optimum concentrations for subsequent studies. NHEK cells (6 x 103 cells/well) were seeded in 96-well plates (Nunc, Thermofisher scientific, MA, USA) and treated with different concentrations of poly I:C, LPS and poly (I:C) + LPS for 24 h according to the results of cells viability. We define the best concertation of LPS plus poly I:C by measuring the expression of TSLP. The supernatant of NHEK cells were collected from the 6-wells plates. Thymic stromal lymphopoietin (TSLP) were determined by using ELISA kits (R&D, Minnesota, USA). The tests were performed strictly according to the manufacturer's instructions.

Results

Finally, we combined 20 ug/ml LPS and 10 ug/ml poly (I:C) for 24 hours and found that the expression of TSLP in cocktail was significantly higher than another mixed group.