

From TRYPTONE N1 to C-CELL



What is Tryptone N1 ?

For over 20 years, Organotechnie's Tryptone N1 has been cited in a large number of scientific publications. It is widely used in research. This peptone is an **enzymatic hydrolysate of casein**.

Tryptone N1 is highly **versatile** and can also be used to grow a wide variety of bacteria (*E.coli*, *Clostridium*, *Bacillus subtilis*, *Lactobacillus* spp...).



Applications of Tryptone N1

In research applications, Tryptone N1 is mainly used to obtain complex proteins based on cell platforms. Professor Yves Durocher from NRC¹ (Canada) has shown that the addition of Tryptone N1 post-transfection is effective in **enhancing the expression of recombinant proteins** in HEK293 cells.

Tryptone N1 is recognized for:

- Increasing significantly **recombinant protein yields**
- Improving **cell viability**
- Accelerating **cell growth**
- Reducing **cell stress**



C-CELL, IS A RANGE OF ULTRA-FILTERED PLANT HYDROLYSATES. DEVELOPED IN CONTINUATION TO TRYPTONE N1.

C-CELL enable very high performance in cell culture, whether in low-serum or serum-free culture media.

SELECTED VEGETALES SOURCES

C-CELL S : Soja

C-CELL W : Blé

C-CELL P : Pois

C-CELL G : Guar

C-CELL F : Fèverole

C-CELL R : Riz

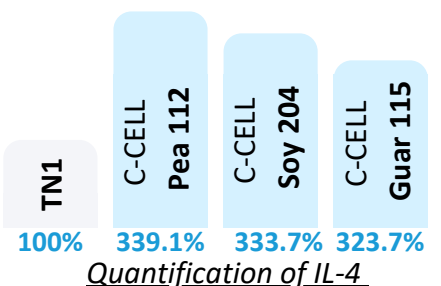
C-CELL PERFORMANCE : EXEMPLES

C-CELL Proliferation

As part of a study on the proliferation and metabolism of **human dermal fibroblasts**², the use of 5 mg/mL of **C-CELL W106** with only 5% FBS resulted in a **300% higher cell proliferation** compared to a medium containing 10% FBS after 15 days of culture. Additionally, **C-CELL W106** induced better **resistance to apoptosis**.

C-CELL Expression

In the context of optimizing IL-4 **protein expression** in **HEK 293**³ cells, **C-CELL Pea P112**, **Soy S204** and **Guar G115** obtained excellent results. These three peptones tripled IL-4 protein expression compared with Tryptone N1.



i For more information on the C-CELL range, please request our scientific posters.

¹ Transient Gene Expression in HEK293 Cells: Peptone Addition Post-transfection Improves Recombinant Protein Synthesis

² Effect of ultrafiltered wheat peptone on human dermal fibroblasts

³ Optimisation of protein production in HEK293 cells with different peptones

Effect of vegetable peptones on proliferation and metabolism of HSKMCin low serum media

Optimization of umbilical cord mesenchymal stromal cell-derived evs production conditions using evs-free fetal bovine serum and vegetal peptone

Investigating the proliferative and serum-educing effect(s) of various protein hydrolysates on "Verocells" as an ATMP bio-production cells.