

★★★ &lt;第17回知的財産翻訳検定試験【第8回英文和訳】&gt; ★★★

《1級課題 -バイオテクノロジー-》

## 【解答にあたっての注意】

1. 問題の指示により和訳してください。
2. 解答語数に特に制限はありません。適切な個所で改行してください。
3. 課題文に段落番号がある場合、これを訳文に記載してください。
4. 課題は4題あります。それぞれの課題の指示に従い、4題すべて解答してください。

問1. \*\*\*START\*\*\*から\*\*\*END\*\*\*までを和訳してください。

(W02013149323)

NATURAL PRODUCTS FOR SKIN CARE

\*\*\*START\*\*\*

Essentially, there exist several skin types:

Combination skin: This skin type is very common and requires separate treatment for each area. It is most generally oily down the T-zone of the facial area and dry on the cheeks.

Dry Skin: This type of skin lacks both sebum and moisture. It looks fine textured, transparent, patchy and fragile. The skin flakes and chaps more easily compared to other skin types, especially after cleansing, where it feels rough, dry and tight. Skin looks dull.

Oily Skin: This skin type has over-reactive sebaceous (oil-producing) glands, which makes the face shiny especially down the central panel (T-zone) of your nose, forehead and chin.

Sensitive Skin: This skin type is prone to redness and is reactive. It often feels tight, hot, rough, or itchy in some areas. It reacts easily to environmental factors, such as the cold, the wind, pollution, and the like.

Normal Skin: This skin type has a balanced oil and water content and it feels smooth and velvety. The color of the skin glows below the translucent surface. This skin type definitely needs care if it is to last.

\*\*\*END\*\*\*

問2. \*\*\*START\*\*\*から\*\*\*END\*\*\*までを和訳してください。

(EP2322561)

ANTI-NIK ANTIBODIES AND USES THEREOF

\*\*\*START\*\*\*

Purifying the antibody or antibody fragment capable of binding the target antigen with a desired affinity from a preparation of the present invention, such as an unpurified anti-serum of the present invention, can be achieved, for example, via affinity chromatography purification of an unpurified or more preferably a protein-G purified-anti-serum of the present invention, by using the target antigen as an affinity ligand, and via selective elution of a substrate-bound antibody or antibody fragment under conditions of controlled stringency (for example under conditions of controlled pH and/or salt concentration). In particular, an antibody or antibody fragment of the present invention capable of binding the target

antigen with a maximal affinity may be conveniently obtained by elution under conditions of effectively maximal stringency (for example under conditions of effectively maximal or minimal pH and/or maximal salt concentration).

Typically, an antibody or antibody fragment may be bound to a substrate-attached cognate antigen thereof under conditions of physiological pH and salt concentration, and such an antibody or antibody fragment may typically be eluted from the substrate by decreasing the pH to 2.5 or lower, or by increasing the pH to or higher.

\*\*\*END\*\*\*

問3. \*\*\*START\*\*\*から\*\*\*END\*\*\*までを和訳してください。

(W02013151650)

#### NEUROPHILIC NANOPARTICLES

\*\*\*START\*\*\*

Primary Schwann cell cultures were established from newborn rat pups. Briefly, sciatic nerves can be dissociated enzymatically and mechanically and plated in normal growth medium. From one neonatal rat litter enough cells were obtained for up to six experiments, each providing multiple 6-cm and two 24-well plates. Since the yields from rat samples are much higher as compared to mouse, initial experiments were performed in rat cells. Based on preliminary studies, DOPC/P188 liposomes compositions that are taken up by rat cells (Fig. 1) are similarly effective in cultures from mice (Fig. 5), and DOPC/P188/Cholesterol liposome compositions that are taken up by rat cells (Fig. 3) are similarly effective in cultures from mice (Fig. 5). The purity of the Schwann cell cultures was routinely evaluated by immunolabelling and was over about 90% as judged from anti-p75 and anti-S100 reactivity.

Dissociated dorsal root ganglion (DRG) neuron cultures were established from embryonic day 15 (E15) rodents. These non-myelinating, dissociated cultures can serve to assess the uptake of liposomes into sensory neurons.

\*\*\*END\*\*\*

問4. \*\*\*START\*\*\*から\*\*\*END\*\*\*までを和訳してください。

(W02013138684)

#### GENETICALLY ENCODED FLUORESCENT SENSORS FOR DETECTING INTRACELLULAR SIGNALING THROUGH DIACYLGLYCEROL PATHWAYS

\*\*\*START\*\*\*

What is claimed is:

1. A diacylglycerol (DAG) sensor fusion protein comprising
  - a. a PKC protein comprising a DAG binding domain and a fusion region,
  - and
  - b. a circularly permuted fluorescent protein,wherein the fusion region is located upstream from the DAG binding domain or within the DAG binding domain;  
wherein the fluorescent protein is fused with the PKC protein at a

17IPB\_ques.txt

fusion site present within the fusion region;  
and wherein the fluorescence of the DAG sensor fusion protein changes upon binding to DAG.

14. A multiplex system for detecting one or more analytes comprising the DAG sensor fusion protein of any one of claims 1-13, and one or more additional fluorescent sensor that specifically detects and analyte other than DAG, wherein the fluorescent sensor comprises a) a fluorescent sensor fusion protein comprising a fluorescent protein, or b) a fluorescent dye.

\*\*\*END\*\*\*