

For research use only

Aequorin Luminescence Standard Kit

Product code: SK

Kit Contents

- A : Aequorin (50 µg):**
1 µg/µL Aequorin (Stored at -80 °C)
- B : Dilution buffer (10 mL):**
0.1 % Bovine serum albumin
in 10 mM EDTA-50 mM Tris-HCl (pH 7.6).
(Stored at -20 °C)
- C : CaCl₂ solution (50 mL):**
50 mM CaCl₂ in 50 mM Tris-HCl (pH 7.6)
(Stored at room temp.)



Assay Protocol

- Step 1. Dilute "A: Aequorin" with "B: Dilution buffer".**
e.g. First, prepare 100 ng/mL solution of aequorin.
And then diluted by 10 times (0 ~ 10,000 pg/µL).
- Step 2. Place the diluted aequorin solution in a assay plate for luminometer.**
e.g. 3 µL of aequorin solution in 96-well white plate (Nunc, #236108).
- Step 3. Inject "C: CaCl₂ solution" into the diluted aequorin solution in a plate and measure for 5 sec in 0.1 sec interval with luminometer.**
e.g. Centro LB960 (Berthold Technologies)

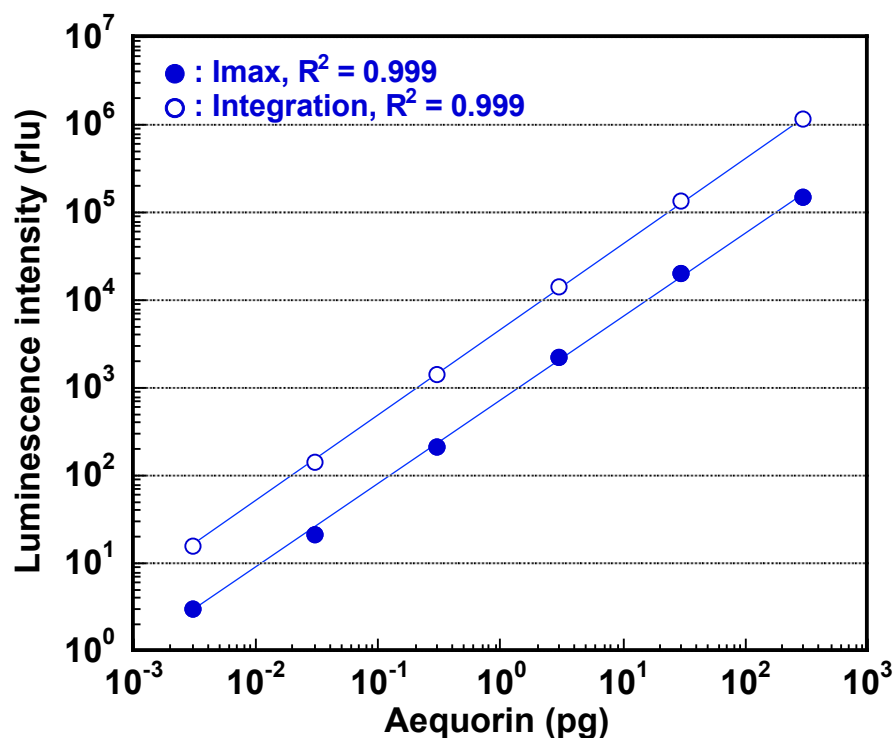
Aequorin concentration and luminescence intensity

Aequorin (pg/3 µL)	Luminescence intensity ^a (I _{max})	SD	CV (%)	Luminescence intensity ^{a,b} (Integrated)	SD	CV (%)
0	1	—	—	4	—	—
0.003	3	0	16.0	16	1	8.3
0.03	21	1	5.5	139	5	3.5
0.3	214	10	4.5	1,410	38	2.7
3	2,179	61	2.8	14,516	372	2.6
30	20,571	1,043	5.1	137,516	6,155	4.5
300	152,998	2,459	1.6	1,138,268	21,435	1.9
3,000	Range over	—	—	Range over	—	—
30,000	Range over	—	—	Range over	—	—

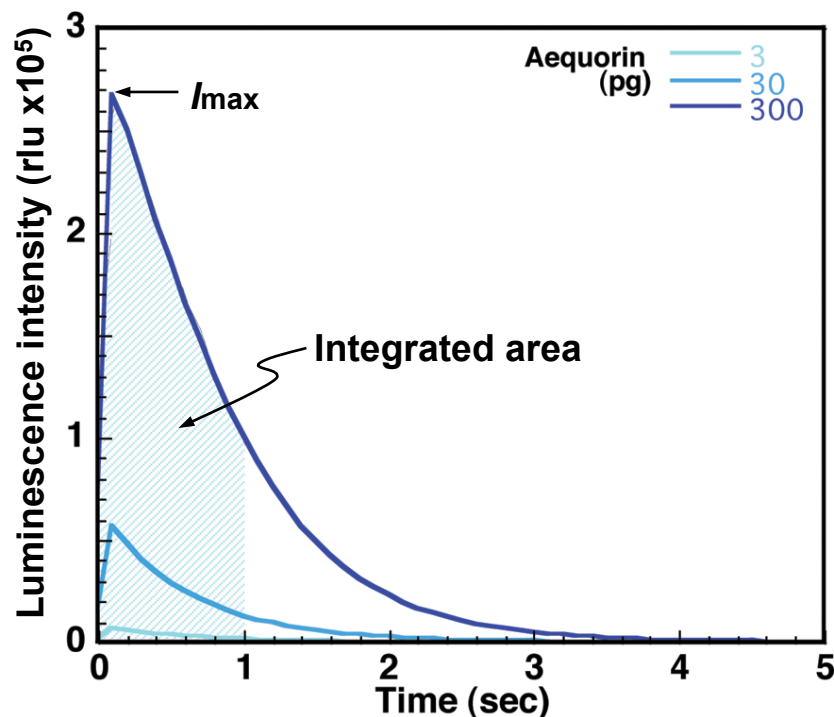
^an = 5

^bIntegrated for 1 sec in 0.1 sec interval.

Luminescence standard curve of aequorin



Ca²⁺-triggered luminescence pattern of aequorin



Supplier	Contact
JNC CORPORATION Shin Otemachi Bldg. 9F 2-2-1 Otemachi, Chiyoda-ku, Tokyo 100-8105 URL http://www.jnc-corp.co.jp	JNC Corporation, Yokohama Research Center 5-1 Okawa, Kanazawa-ku, Yokohama, Japan 236-8605 Tel: 045-786-5501 Fax: 045-786-5511 E-mail: biophoton@jnc-corp.co.jp