



## Product Information

### Ethidium Homodimer-1 (EthD-1)

Catalog Number	Unit Size
C010	1 mg

**Storage upon receipt:**

- -20°C
- Protect from light

**Ex/Em:** 528/617 nm, bound to DNA

### Product Description

Ethidium Homodimer-1 (EthD-1) is a high affinity fluorescent nucleic acid stain that is weakly fluorescent until bound to DNA and emits red fluorescence (excitation/emission maxima ~528/617). The EthD-1 is highly positively charged and cell-impermeant, and widely used as cell viability indicator.

### Specifications

**Chemical Name:** ethidium homodimer-1

**Molecular Formula:** C<sub>46</sub>H<sub>50</sub>Cl<sub>4</sub>N<sub>8</sub>

**Molecular Weight:** 856.77

**CAS Number:** 61926-22-5

### Application

Ethidium Homodimer-1 is a high affinity fluorescent nucleic acid stain. It binds to both DNA and RNA in a sequence-independent manner and with a >30-fold fluorescence enhancement. The DNA binding of each Ethidium Homodimer covers four base pairs and is believed to occur by intercalation. Because the dye is highly positively charged, it cannot cross cell membranes to stain living cells. However, it is very useful to detect nucleic acids in solution, or detect dead cells with disintegrated cell membranes.