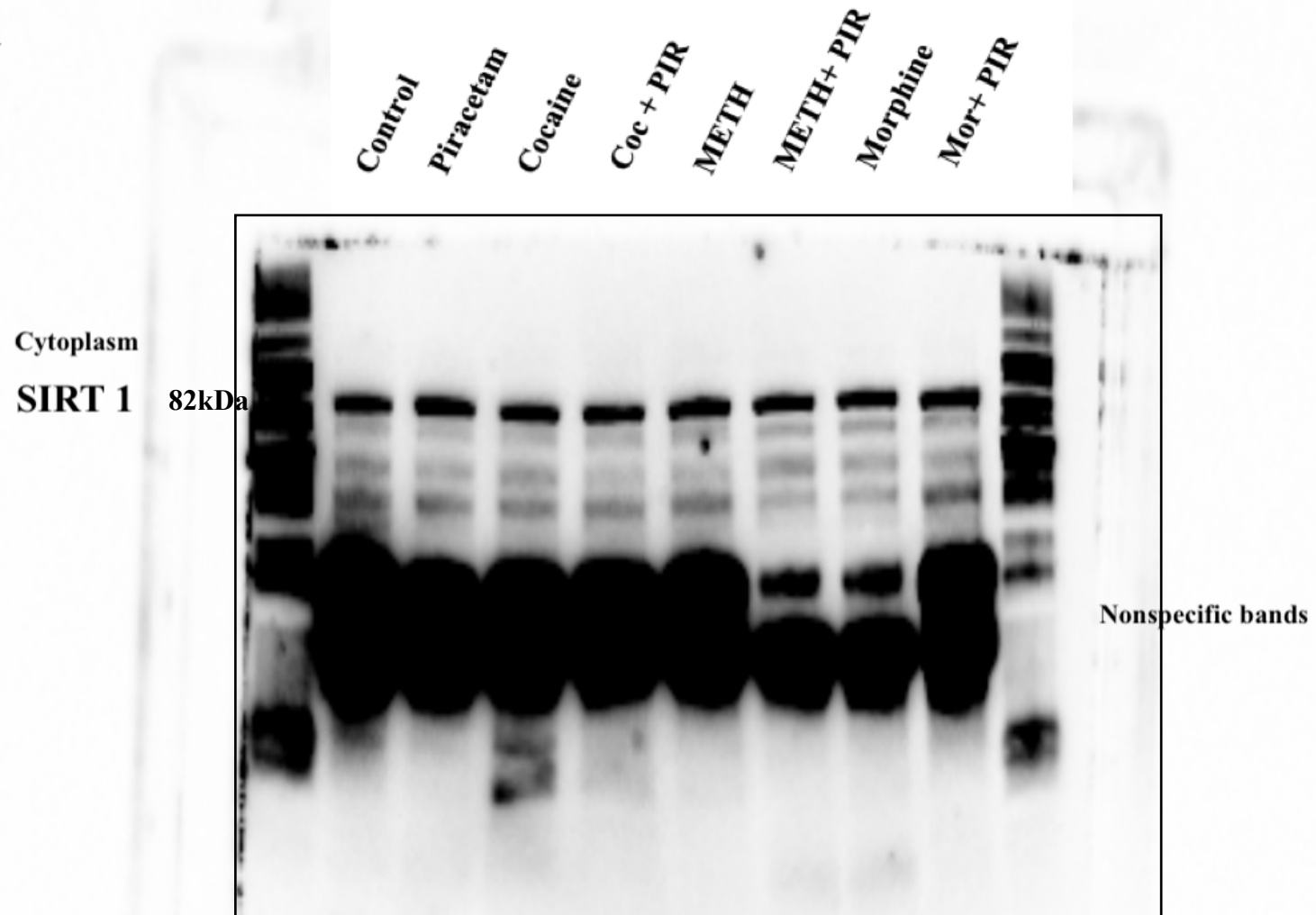


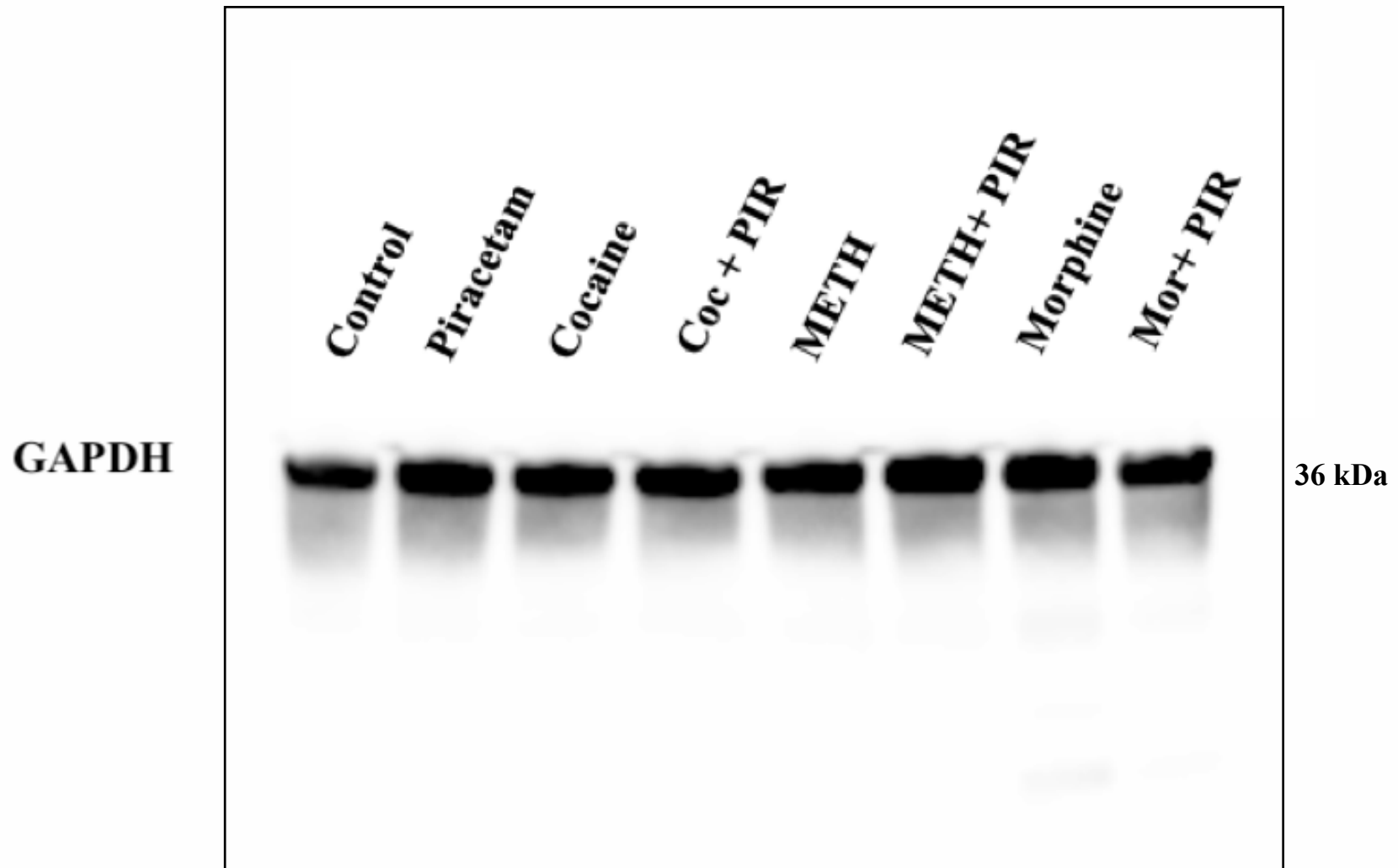
**Figure 7**

**A**



**Figure 7 A: Protective Effect of piracetam against psychostimulants and opioids on cytoplasmic SIRT-1 in human primary astrocytes.**

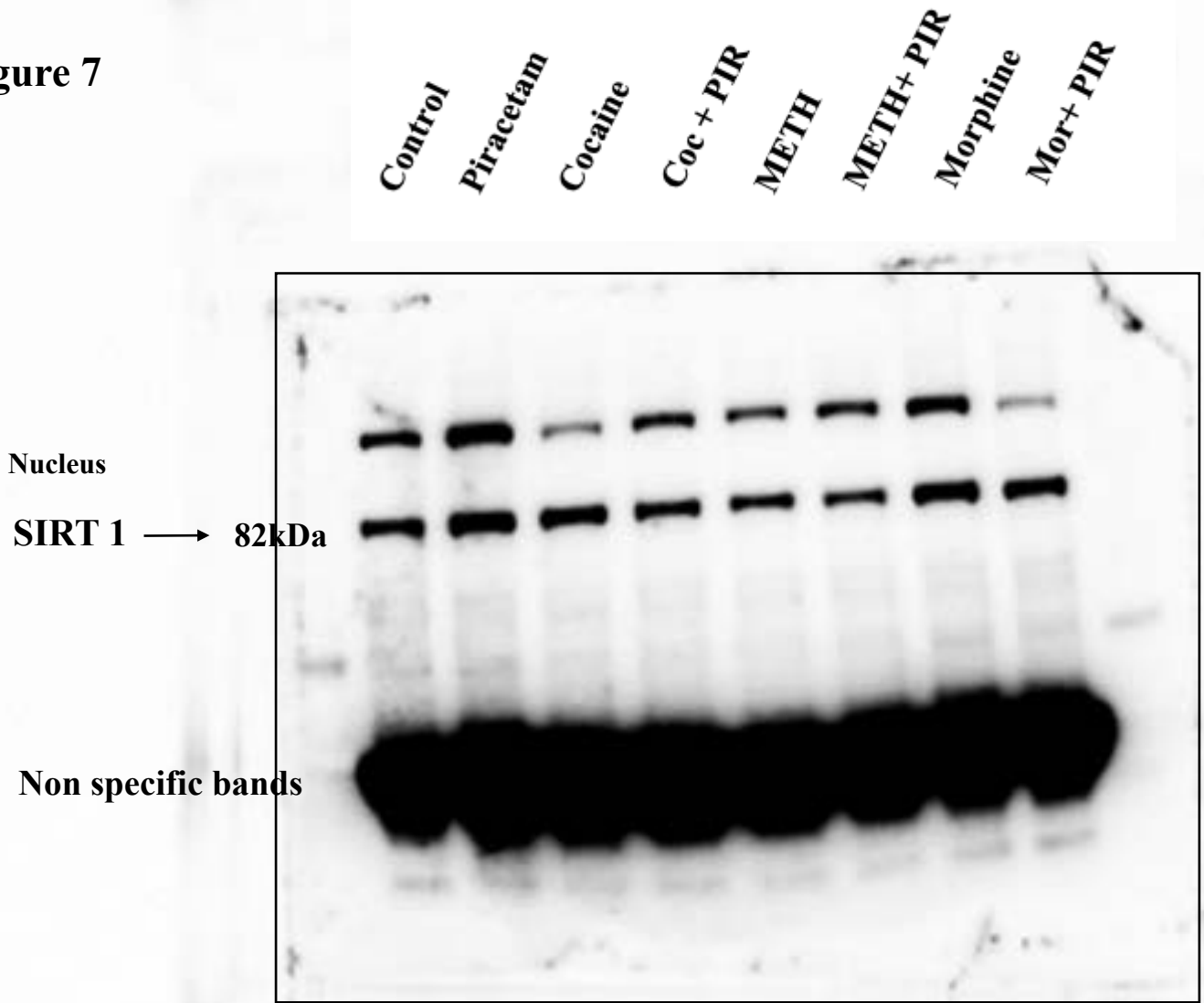
**The representative blot shows SIRT-1 protein level in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)**



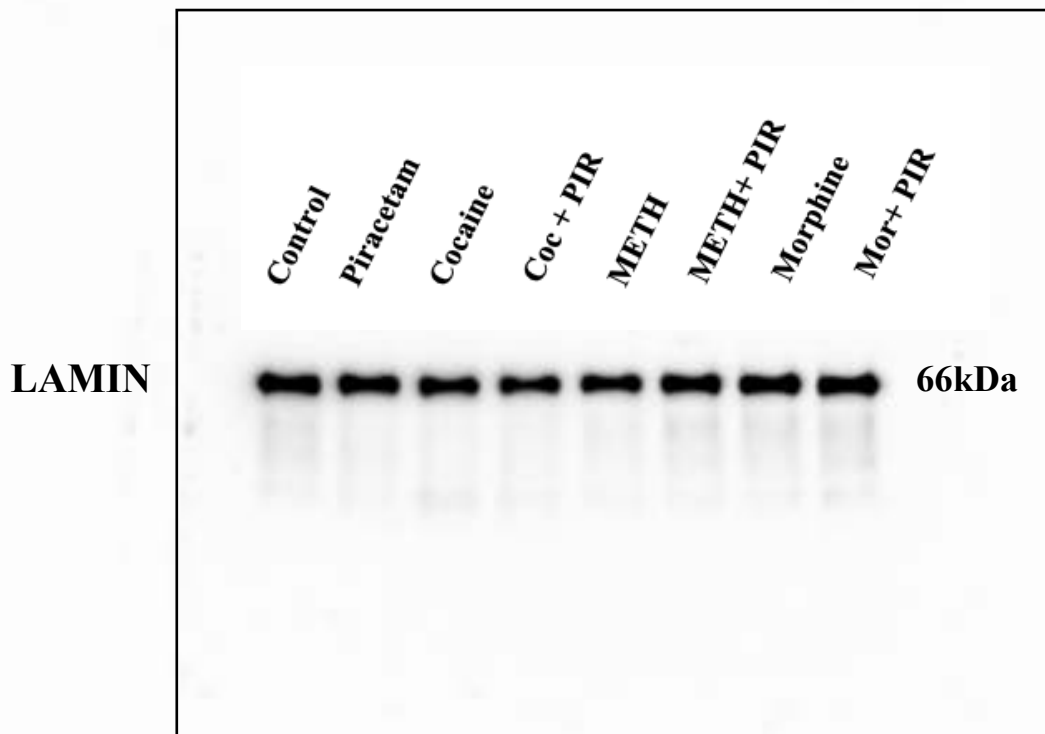
**Figure 7 A: GAPDH for cytoplasmic SIRT-1 in human primary astrocytes.**  
The representative blot shows GAPDH for SIRT-4 in control, cocaine (1  $\mu\text{M}$ ), METH (10  $\mu\text{M}$ ) and morphine (5  $\mu\text{M}$ ) alone or in combination with piracetam (10  $\mu\text{M}$ )

**Figure 7**

**C**



**Figure 7 C: Protective Effect of piracetam against psychostimulants and opioids on nuclear SIRT-1 in human primary astrocytes.**  
The representative blot shows SIRT-1 protein level in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)



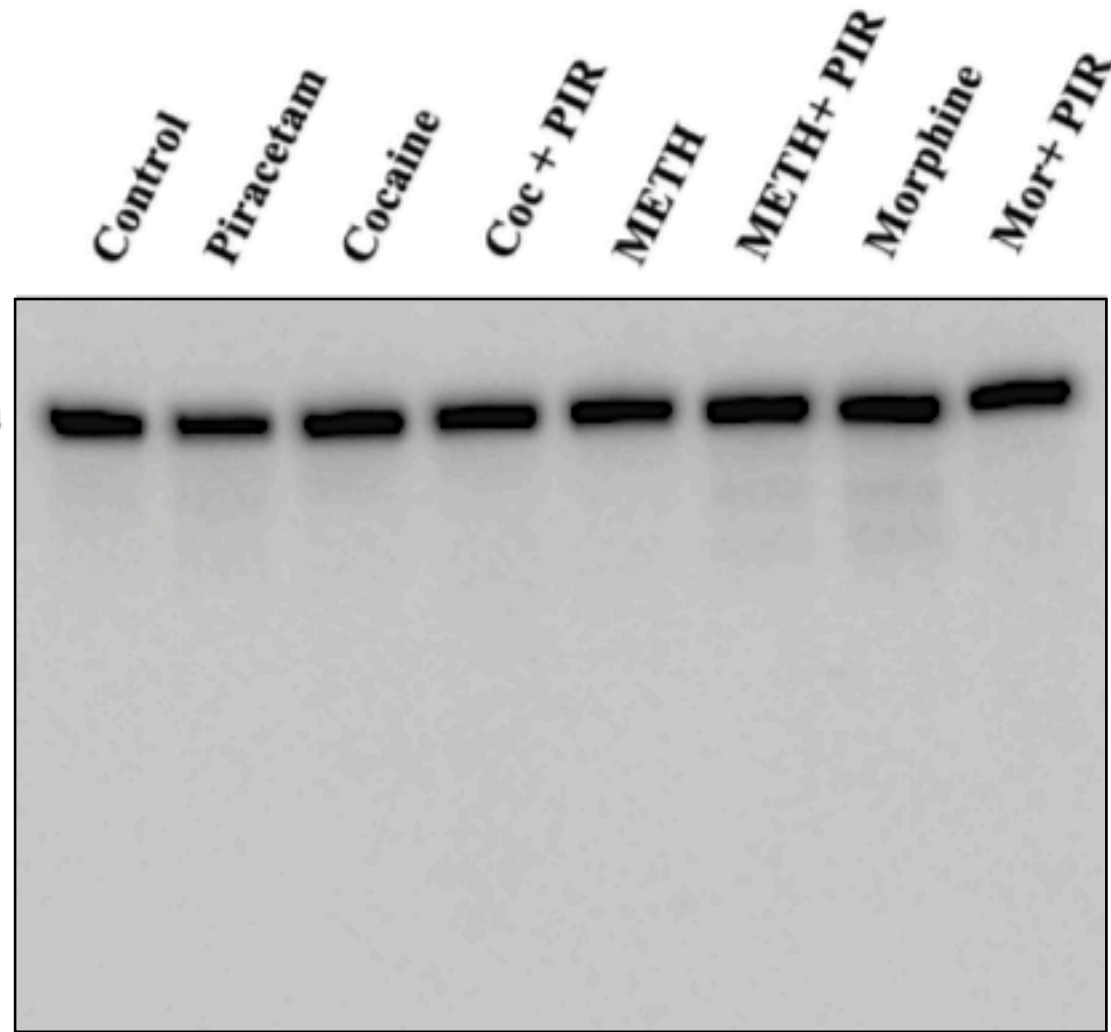
**Figure 7 C: LAMIN for nuclear SIRT-1 in human primary astrocytes. The representative blot shows LAMIN for SIRT-1 in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)**

**Figure 7**

**E**

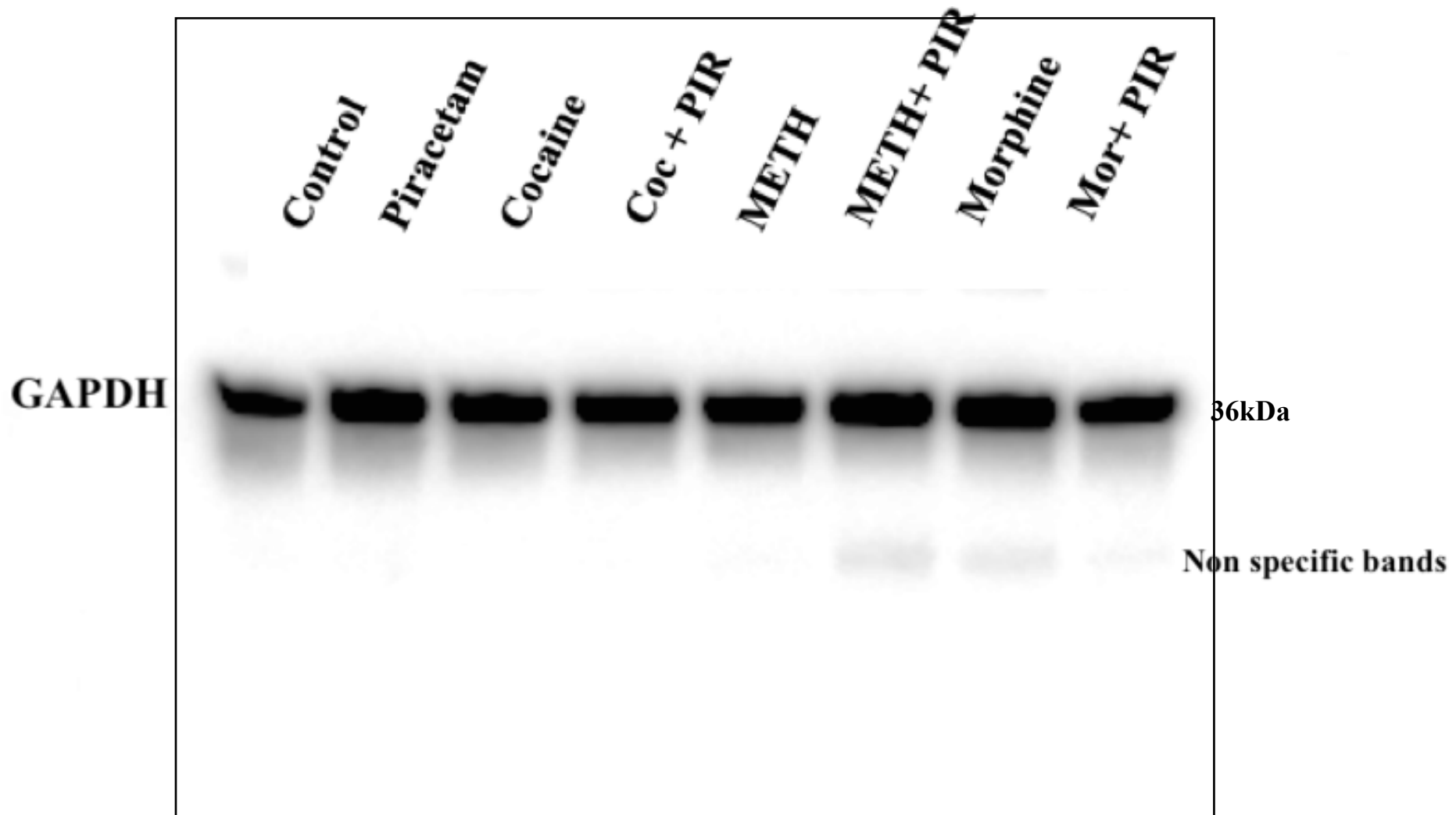
**Cytoplasm**

**SIRT 7** → **45kDa**



**Figure 7 E: Protective Effect of piracetam against psychostimulants and opioids on cytoplasmic SIRT-7 in human primary astrocytes.**

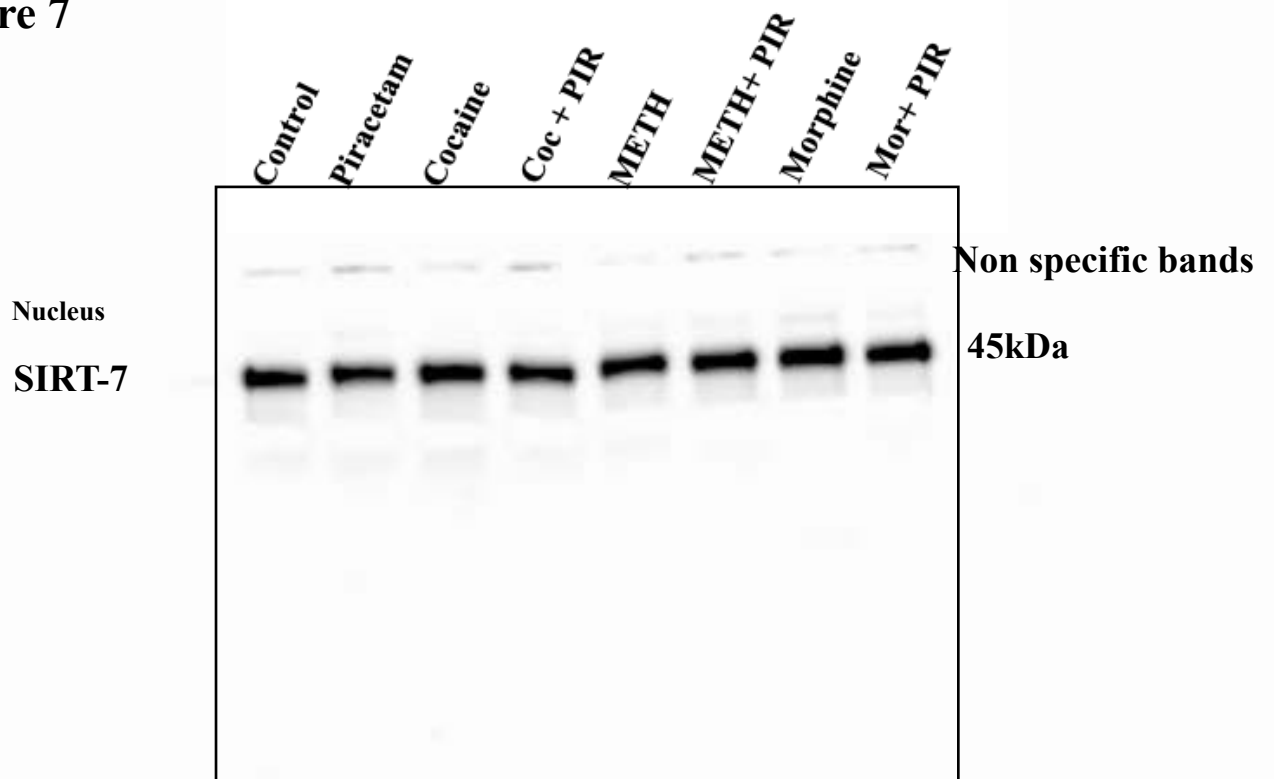
**The representative blot shows SIRT-7 protein level in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)**



**Figure 7 E: GAPDH for cytoplasmic SIRT-7 in human primary astrocytes.**  
The representative blot shows GAPDH for SIRT-7 in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)

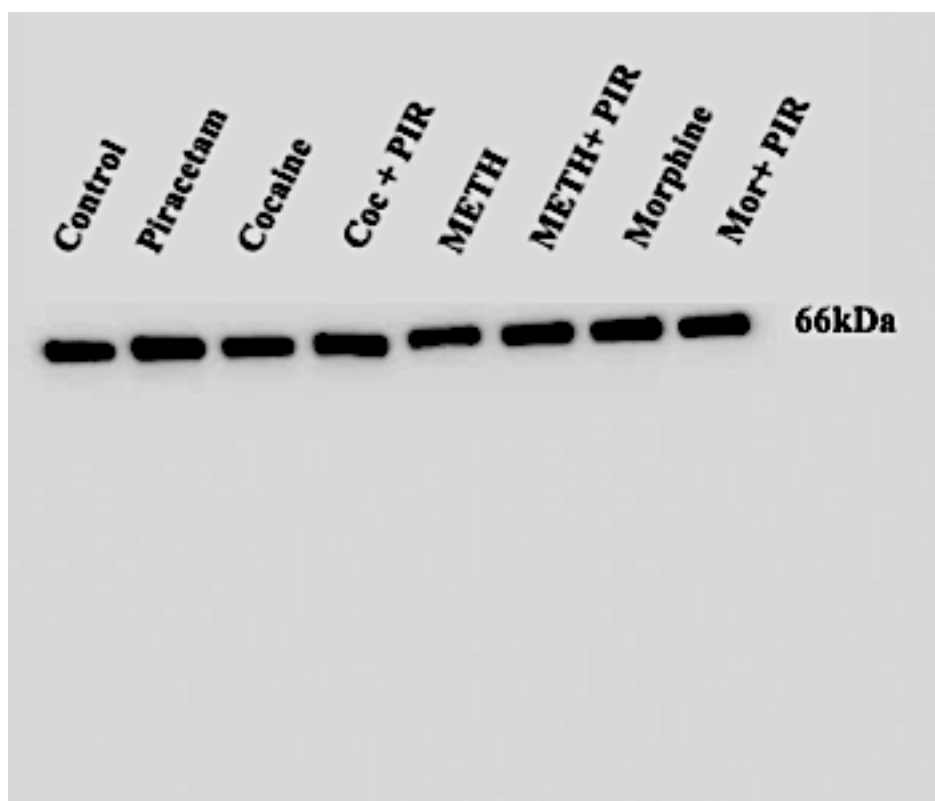
**Figure 7**

**G**



**Figure 7 G: Protective Effect of piracetam against psychostimulants and opioids on nuclear SIRT-7 in human primary astrocytes.**

The representative blot shows SIRT-7 protein level in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)



**Figure 7 G: LAMIN for nuclear SIRT-7 in human primary astrocytes.**  
The representative blot shows LAMIN for SIRT-7 in control, cocaine (1  $\mu$ M), METH (10  $\mu$ M) and morphine (5  $\mu$ M) alone or in combination with piracetam (10  $\mu$ M)